



INTERNATIONAL CIVIL AVIATION ORGANIZATION

**THE MIDDLE EAST AIR NAVIGATION PLANNING
AND IMPLEMENTATION REGIONAL GROUP
(MIDANPIRG)**

**REPORT OF THE EIGHTH MEETING OF
ATM/SAR/AIS SUB-GROUP**

(Muscat, Oman 20-23 November 2006)

The views expressed in this Report should be taken as those of the MIDANPIRG ATM/SAR/AIS Sub-Group and not of the Organization. This Report will, however, be submitted to the MIDANPIRG and any formal action taken will be published in due course as a Supplement to the Report.

Approved by the Meeting
and published by authority of the Secretary General

The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of ICAO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontier or boundaries.

TABLE OF CONTENTS

Page

PART I - HISTORY OF THE MEETING

1.	Place and Duration.....	1
2.	Opening.....	1
3.	Attendance	1
4.	Officers and Secretariat.....	1
5.	Language	1
6.	Agenda.....	2/3
7.	Conclusions and Decisions - Definition	3
8.	List of Draft Conclusions and Draft Decisions	3

PART II - REPORT ON AGENDA ITEMS

Report on Agenda Item 1	1-1
Report on Agenda Item 2	2-1
Appendix 2A	
Report on Agenda Item 3	3-1/3-8
Appendices 3A – 3D	
Report on Agenda Item 4	4-1/4-4
Appendix 4A	
Report on Agenda Item 5	5-1-5-2
Appendix 5A	
Report on Agenda Item 6	6-1/6-4
Report on Agenda Item 7	7-1/7-2
Appendix 7A	
Report on Agenda Item 8	8-1/8-3
Appendix 8A	
Report on Agenda Item 9	9-1/9-6
Appendix 9A	
Report on Agenda Item 10	10-1/10-6
Appendices 10A – 10F	
Report on Agenda Item 11	11-1
Appendices 11A & 11B	
Report on Agenda Item 12	12-1
Appendices 12A – 12D	
Report on Agenda Item 13	13-1
List of Participants	Attachment A

ATM/SAR/AIS SG/8
History of the Meeting

PART I – HISTORY OF THE MEETING

1. PLACE AND DURATION

1.1 The eighth meeting of ATM/SAR/AIS Sub-Group was held at the conference hall of the Golden Tulip Hotel Muscat, Oman from 20-23 November 2006.

2. OPENING

2.1 The Meeting was opened by Mr. Mohamed R. M. Khonji, ICAO Regional Director, Middle East Office, who welcomed all the participants to this important meeting. Mr. Khonji thanked the Directorate General of Civil Aviation and Meteorology of Oman for hosting this meeting. He extended special thanks for Mr. Abdul Rahim S. Al-Harmi, Director General of the Directorate of Civil Aviation and Meteorology and Mr. Abdullah Al-Harthy, Senior Air Traffic Controller, DGCAM Oman and Chairman of MIDANPIRG for their good cooperation and for their hospitality.

2.2 Mr. Khonji noted that it had been almost two years since the ATM/SAR/AIR SG/8 meeting in 2004, and that considering the nature of business of the Sub-Group, this had been a long time. Mr. Khonji briefed the meeting about work to be done ahead of MDANPIRG/10 and related activities in 2007.

2.3 Finally, Mr. Khonji thanked participants from the MID States and the international organizations, and wished all fruitful deliberations and a successful meeting.

2.4 Mr. Abdullah N. Al-Harthy, Senior Air Traffic Controller, DGCAM Oman and Chairman of MIDANPIRG also welcomed all the participants to Oman, and wished them a successful meeting.

3. ATTENDANCE

3.1 The meeting was attended by a total of fifty (50) participants, including experts from nine (9) States (Bahrain, Egypt, Iran, Iraq, Kuwait, Oman, Saudi Arabia, Syria and United Arab Emirates) and 3 three Organizations (EUROCONTROL, IATA and NATO). The list of participants is at the **Attachment A** to the report.

4. OFFICERS AND SECRETARIAT

4.1 The meeting was Chaired by Mr. Hamad M. Alaufi, Manager of ATS Planning, Presidency of Civil Aviation, Saudi Arabia.

4.2 Mr. Mohamed Smaoui RO/AIS/MET was the Secretary of the meeting supported by Mr. M. Khonji, Regional Director and Mr. S. Machobane RO/ATM from the ICAO Middle East Office.

5. LANGUAGE

5.1 Discussions were conducted in English and documentation was issued in English.

6. AGENDA

6.1 The following Agenda was adopted:

Agenda Item 1: Adoption of provisional agenda

Agenda Item 2: Follow-up on MIDANPIRG Decisions and Conclusions relevant to the ATM/SAR and AIS/MAP fields

ATM/SAR/AIS SG/8
History of the Meeting

- Agenda Item 3: Improvement of the MID ATS Route Network
- 3.1 Review of the ATS route network
- 3.2 Review of the report of the Special Civil/Military Coordination Meeting
- Agenda Item 4: RVSM operations and Monitoring activities in the MID Region
- Agenda Item 5: SSR Code Allocation Plan (CAP) for the MID Region
- Agenda Item 6: ATS Safety Management Systems and Incident Analysis
- Agenda Item 7: Contingency Plans
- Agenda Item 8: Status of implementation of Search and Rescue (SAR) provisions
- Agenda Item 9: Latest developments in the ATM field
- Agenda Item 10: AIS/MAP Issues
- 10.1 Review of the report of the AIS/MAP TF/3 meeting
- 10.2 Global AIS Congress
- Agenda Item 11: Review of Air Navigation deficiencies in the ATM/SAR and AIS/MAP fields
- Agenda Item 12: Future Work Programme
- Agenda Item 13: Any other business

7. CONCLUSIONS AND DECISIONS – DEFINITION

7.1 All MIDANPIRG Sub-Groups and Task Forces record their actions in the form of Conclusions and Decisions with the following significance:

- a) **Conclusions** deal with the matters which, in accordance with the Group's terms of reference, merit directly the attention of States on which further action will be initiated by ICAO in accordance with established procedures; and
- b) **Decisions** deal with matters of concern only to the MIDANPIRG and its contributory bodies

8. LIST OF DRAFT CONCLUSIONS AND DRAFT DECISIONS

- | | |
|------------------------------|-----------------------------------------------------------------------------------------------|
| <i>DRAFT CONCLUSION 8/1:</i> | <i>MID ATS ROUTE NETWORK</i> |
| <i>DRAFT CONCLUSION 8/2:</i> | <i>CIVIL/MILITARY COORDINATION</i> |
| <i>DRAFT CONCLUSION 8/3:</i> | <i>COORDINATION OF FLIGHTS OPERATING OVER HIGH SEAS</i> |
| <i>DRAFT CONCLUSION 8/4:</i> | <i>UNCOORDINATED FLIGHTS OVER THE RED SEA AREA</i> |
| <i>DRAFT CONCLUSION 8/5:</i> | <i>PROVISION OF DATA FOR THE DEVELOPMENT OF THE RVSM POST- IMPLEMENTATION SAFETY ANALYSIS</i> |
| <i>DRAFT CONCLUSION 8/6:</i> | <i>SPECIAL BAGHDAD FIR COORDINATION MEETING</i> |

ATM/SAR/AIS SG/8
History of the Meeting

<i>DRAFT CONCLUSION 8/7:</i>	<i>SURVEY RELATIVE TO THE IMPROPER HANDLING OF FPLS AND ASSOCIATED ATS MESSAGES</i>
<i>DRAFT CONCLUSION 8/8:</i>	<i>FLEXIBLE HANDLING OF TRAFFIC INTENDING TO USE THE RVSM AIRSPACE</i>
<i>DRAFT DECISION 8/9:</i>	<i>ESTABLISHMENT OF A MID REGION SSR CODE STUDY GROUP</i>
<i>DRAFT CONCLUSION 8/10:</i>	<i>REPORTING MECHANISM AND SHARING OF SAFETY-RELATED INFORMATION</i>
<i>DRAFT CONCLUSION 8/11:</i>	<i>SURVEY ON ATS SAFETY MANAGEMENT</i>
<i>DRAFT CONCLUSION 8/12:</i>	<i>DEVELOPMENT AND PROMULGATION OF CONTINGENCY PLAN</i>
<i>DRAFT CONCLUSION 8/13:</i>	<i>SAR AGREEMENTS</i>
<i>DRAFT CONCLUSION 8/14:</i>	<i>406 MHZ BEACON REGISTRATION DATABASE (IBRD)</i>
<i>DRAFT DECISION 8/15:</i>	<i>MID REGION PBN STRATEGY</i>
<i>DRAFT CONCLUSION 8/16:</i>	<i>ICAO LANGUAGE PROFICIENCY</i>
<i>DRAFT CONCLUSION 8/17:</i>	<i>USE OF THE ENGLISH LANGUAGE AND STANDARD ICAO PHRASEOLOGY</i>
<i>DRAFT CONCLUSION 8/18:</i>	<i>USE OF EMAIL TO ENHANCE COMMUNICATION BETWEEN THE AIS COMMUNITY IN THE MID REGION</i>
<i>DRAFT CONCLUSION 8/19:</i>	<i>ADVANCE POSTING OF THE AIRAC INFORMATION ON THE WEB</i>
<i>DRAFT CONCLUSION 8/20:</i>	<i>ELECTRONIC AIP (EAIP)</i>
<i>DRAFT CONCLUSION 8/21:</i>	<i>METHODOLOGY FOR THE IMPLEMENTATION OF QMS WITHIN MID STATES' AISS</i>
<i>DRAFT DECISION 8/22:</i>	<i>ESTABLISHMENT OF A QMS IMPLEMENTATION ACTION GROUP</i>
<i>DRAFT CONCLUSION 8/23:</i>	<i>LICENSING OF THE AIS/MAP PERSONNEL</i>
<i>DRAFT CONCLUSION 8/24:</i>	<i>ROADMAP FOR THE IMPLEMENTATION OF ETOD REQUIREMENTS</i>
<i>DRAFT CONCLUSION 8/25:</i>	<i>COLLABORATIVE APPROACH FOR THE IMPLEMENTATION OF ETOD REQUIREMENTS</i>
<i>DRAFT DECISION 8/26:</i>	<i>ESTABLISHMENT OF AN ETOD WORKING GROUP</i>
<i>DRAFT CONCLUSION 8/27:</i>	<i>AIS/MAP TIMELINES FOR THE MID REGION</i>
<i>DRAFT DECISION 8/28:</i>	<i>REVISED TERMS OF REFERENCE AND WORK PROGRAMME OF THE AIS/MAP TASK FORCE</i>
<i>DRAFT CONCLUSION 8/29:</i>	<i>FOLLOW-UP ON THE OUTCOME OF THE GLOBAL AIS CONGRESS</i>
<i>DRAFT DECISION 8/30:</i>	<i>REVISED TOR OF THE ATM/SAR/AIS SUB-GROUP</i>
<i>DRAFT DECISION 8/31:</i>	<i>ESTABLISHMENT OF THE RVSM/PBN TASK FORCE</i>
<i>DRAFT DECISION 8/32:</i>	<i>IMPLEMENTATION OF WORK PROGRAMME IN SUPPORT OF STRATEGIC PERFORMANCE OBJECTIVES</i>

ATM/SAR/AIS SG/8
Report on Agenda Item 1

PART II: REPORT ON AGENDA ITEMS

REPORT ON AGENDA ITEM 1: ADOPTION OF PROVISIONAL AGENDA

1.1 The meeting reviewed and adopted the Provisional Agenda as at Para 6 of the History of the Meeting.

ATM/SAR/AIS SG/8
Report on Agenda Item 2

REPORT ON AGENDA ITEM 2: FOLLOW UP ON MIDANPIRG DECISIONS AND CONCLUSIONS RELEVANT TO THE ATM/SAR AND AIS/MAP FIELDS

2.1 Under this agenda item, the meeting noted the follow up actions taken by the Secretariat and States on MIDANPIRG/9 Conclusions and Decisions relevant to the ATM/SAR and AIS/MAP fields as at **Appendix 2A** to the report on Agenda Item 2.

2.2 The meeting recalled that the MMS/3 meeting held in Jeddah, 4-6 September 2006, raised concern about the important number of current MIDANPIRG Conclusions and Decisions and was of view that the review of these Conclusions/Decisions consume a lot of time. Accordingly, the meeting was of view that each MIDANPIRG subsidiary body should review the MIDANPIRG Conclusions/Decisions related to its Terms of Reference (TOR) and decide whether to maintain, remove or replace these Conclusions/Decisions with more up-to-date ones.

2.3 Based on the above, the meeting agreed to review all MIDANPIRG/9 Conclusions/Decisions related to the ATM/SAR and AIS/MAP fields under the appropriate agenda items.

2.4 The meeting noted the reservations expressed by UAE about the status of MIDANPIRG Conclusion 9/7 "*Implementation of T-RNAV*" which states that Regional Supplementary Procedures should be updated to encompass provisions for introduction of T-RNAV and that this should be framed in such a manner that States may proceed with implementation at a time and manner suited to their prevailing requirements.

2.5 The meeting noted however, that The Required Navigation Performance and Special Operational Requirements Study Group (RNPSORSG), in order to avoid proliferation of regional navigation specifications, is reviewing the current concept of RNP/RNAV and new guidance material on the concept of Performance Based Navigation (PBN) has been developed and is expected to be published in the beginning of 2007. It was highlighted that in the new specifications T-RNAV is no longer used and that for Terminal Area it is expected that only RNP 1 and RNAV 1 navigation specifications will be used.

2.6 UAE pointed out that whilst it is recognized that convergence between European States and the FAA presents the potential for global criteria, the current situation remains that OPS/AIR approval criteria and SUPPs are in existence for P-RNAV with a large number of approvals issued and procedures in place. Therefore, until global agreement on T-RNAV has been reached and implemented, P-RNAV represents the only PBN solution for areas where RNP-5/ B-RNAV does not meet operational requirements in congested airspace. Accordingly, UAE urges introduction of P-RNAV SUPPs as agreed for the MID Region as an interim measure.

ATM/SAR/AIS SG/8
 Appendix 2A to the Report on Agenda Item 2

FOLLOW-UP ACTION ON MIDANPIRG/9 CONCLUSIONS/DECISIONS

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
<p>DECISION 9/1: REVISED STATEMENT OF BORPC FOR REGIONAL AIR NAVIGATION PLANNING AND IMPLEMENTATION</p> <p>That, the revised Statement of BORPC for the regional air navigation planning and implementation be incorporated into the MID Basic Air Navigation Plan (ANP).</p>	<p>Action taken</p>	
<p>CONCLUSION 9/6: RNAV/RNP IMPLEMENTATION STRATEGY FOR THE MID REGION</p> <p>That, the Phase 2 implementation strategy for the RNAV/RNP implementation in the MID Region be as follows:</p> <ul style="list-style-type: none"> a) where feasible, the MID Region will consider the establishment of RNAV/RNP areas instead of RNP/RNAV routes with a view to make maximum flexible use of airspace; b) the lower limit of the RNAV/RNP areas will be progressively reduced from FL285 to FL195, where feasible, taking into account VHF coverage capability and its incidence on the agreed target level of safety; c) unidirectional routes will be established, if practicable, in lieu of the present bi-directional routing network with a view to introduce parallel/flexible routes in an B-RNAV environment; d) plan for a smooth transition towards satellite-based air navigation taking into consideration the requirements of the Global CNS/ATM Implementation Plan; and e) the military authorities be involved in the planning process. 	<p>Ongoing</p>	<p>Still current</p>

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
<p>CONCLUSION 9/7: IMPLEMENTATION OF T-RNAV</p> <p>That, taking into account the fact that regulatory criteria, along with guidance on procedure and airspace design, ATC training material and information material for various categories of operational staff has been issued in the European Region:</p> <ul style="list-style-type: none"> a) MID States are encouraged to introduce airworthiness and operational approval criteria equivalent to JAA TGL-10 in order that MID-based operators can benefit from T-RNAV procedures currently being implemented in Europe; b) MID Regional Supplementary Procedures be updated to encompass provisions for introduction of T-RNAV. This provision be framed in such a manner that States may proceed with implementation at a time and manner suited to their prevailing requirements; c) MID States intending to implement T-RNAV provide prior notice through an Aeronautical Information Circular setting out the aircraft and operational approval criteria, RNAV procedure design principles and ATC operational procedures; and d) operators be consulted and given the longest possible lead time when T-RNAV is to be implemented. 	<p>Pending</p>	<p>New developments related to RNP/RNAV and PBN</p> <p>To be reviewed by the RVSM/PBN TF/1 meeting</p>
<p>CONCLUSION 9/8: IMPLEMENTATION OF THE ATS SAFETY MANAGEMENT PROGRAMMES IN THE MID REGION</p> <p>That,</p> <ul style="list-style-type: none"> a) in accordance with the provisions of Annex 11(Chapter 2 paragraph 2.26), States shall implement systematic and appropriate ATS safety management programme (SMS) with a view to ensure that: <ul style="list-style-type: none"> i) the established level of safety applicable to the provision of ATS within an airspace or at an aerodrome is met; and ii) safety related enhancements be implemented whenever necessary; b) with a view to ensure that the activities necessary for the implementation of safety management programmes be carried out in a timely manner, adequate budgetary provisions be made; c) sustained cooperation and co-ordination with adjacent States/service providers be made in the process; and d) States explore ways and means of establishing a mechanism for setting up the standards, monitoring requirements and criteria for the regional implementation of ATS safety management programmes. 	<p>Ongoing</p>	<p>To be superseded by draft Conclusion 8/11</p>

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
<p>CONCLUSION 9/9: MONITORING REQUIREMENTS IN RESPECT OF B-RNAV</p> <p>That,</p> <ul style="list-style-type: none"> a) taking into account, conclusive reports indicating that the region has gained enough confidence on the reliability/maturity of the system established for the safe implementation and post-implementation of B-RNAV in the MID region, the monitoring mechanism as established by MECMA be discontinued; and b) the discontinuation of the monitoring mechanism for RNP5/B-RNAV does not absolve States of their responsibilities in ensuring that, within the framework of safety management programmes, appropriate measures are taken for ensuring that: <ul style="list-style-type: none"> i) the agreed level of safety is met and continues to be met; and ii) prompt remedial actions be taken in case any adverse trend is noted. 	<p>Action taken</p> <p>Ongoing</p>	
<p>CONCLUSION 9/10: ESTABLISHMENT OF RNAV SIDs AND STARs IN THE MID REGION</p> <p>That, in accordance with the requirements of the MID CNS/ATM implementation plan, States develop RNAV SIDs and STARs.</p>	<p>Ongoing</p>	
<p>CONCLUSION 9/11: REQUIREMENTS FOR MONITORING</p> <p>That,</p> <ul style="list-style-type: none"> a) operators having met the monitoring requirements as tabulated in Appendix 5F to the report on Agenda Item 5 for a given fleet/type of aircraft will be accepted as having satisfied the requirements for the Middle East Region. In case of Middle East operators, documentation for monitoring shall be provided to the MID Regional Monitoring Agency; b) for non-MID operators, about whose approval status doubt exist, documentation for monitoring shall be provided to the Regional Monitoring Agency; and c) the Regional Monitoring Agency will update the table in the light of data and experience gained in other Regions. 	<p>Ongoing</p>	

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
<p>CONCLUSION 9/12: — MONITORING OF SAFETY IN THE MID REGION</p> <p>That,</p> <ul style="list-style-type: none"> a) having considered the requirements set out in Annex 11, Doc 9574, Doc 9613, the draft SMS manual for ATS and the draft RMA Handbook, concerning various forms of monitoring, namely: <ul style="list-style-type: none"> i) system performance monitoring is necessary to ensure that the implementation and continued operation of RVSM meet the safety objectives; ii) navigation performance monitoring is required to ensure safety objectives are met in the implementation and continued operation of RNP/RNAV; and iii) States are required to carry out continuous monitoring and regular assessment of the safety level achieved in conjunction with implementation of ATS safety management (SMS). b) noting ICAO policy that States be assisted in meeting their responsibilities based, on or related to, monitoring and assessment by a regional monitoring agency (RMA), whose tasking, inter alia, shall include collection and analysis and compilation of data necessary for identification of hazards and trends in safety; and c) safety-related requirements be addressed through establishment of an RMA with personnel possessing the technical skills and experience required to carry out the main functions summarized under items i) through iii) above. 	<p>Action taken</p>	
<p>CONCLUSION 9/13: — MID REGIONAL MONITORING AGENCY (MID RMA) RE-ESTABLISHMENT</p> <p>That, taking into account the urgency of the matter and with the firm commitment of all MID Region States:</p> <ul style="list-style-type: none"> a) the MID Regional Monitoring Agency (MID RMA) be re-established for carrying out RVSM and eventually, RNP and RNAV related duties and responsibilities in the MID Region; b) the MID RMA is to be operational as soon as possible; and c) the Action Plan for the setting up of the MID RMA, the revised duties and responsibilities and guiding principles are at Appendices 5C, 5D, and 5E, to the Report on Agenda Item 5. <p>Note: Appendices in item c) above are not yet finalized. They are subject to further changes, pending the agreement on funding mechanism, modalities and organizational structure.</p>	<p>Action taken</p>	

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
<p>CONCLUSION 9/14: — PROVISION OF UP-TO-DATE INFORMATION TO THE MID RVSM APPROVALS REGISTRY</p> <p>That,</p> <ul style="list-style-type: none"> a) — considering the requirement for a correct and up-to-date registry of RVSM approvals of operators and aircraft in the on-going safety efforts related to RVSM operations within the Middle East Region; States are reminded to provide to the MID RMA* regular updates to the regional database of operator and aircraft approvals; and b) — Until the MID RMA* is established and becomes functional, States forward to the ICAO Regional Office any relevant information likely to have a negative impact on the safety of air navigation in the Region. <p>* MID RMA to be established</p>	<p>Ongoing</p>	<p>To be superseded by Draft Conclusion 8/5</p>
<p>CONCLUSION 9/15: — EXCLUSION FROM MID RVSM AIRSPACE OF AIRCRAFT AND OPERATORS NOT REGISTERED AS BEING RVSM APPROVED</p> <p>That, considering the on-going requirement for safety assurance related to RVSM operations within the Middle East Region:</p> <ul style="list-style-type: none"> a) — operators for whom positive approval data has not been received, be excluded from MID RVSM airspace with immediate effect until approval status, supported by data from an approved monitoring service provider, has been received; b) — MID RVSM provider States, States of Registry and adjacent RMAs be informed about the exclusion; and c) — Taking into account the economic impact on RVSM approved flights from adjacent FIRs which are being systematically excluded from the RVSM airspace as a result of non receipt or improper filing of flight plans, concerned FIRs/Centres be invited to consider the matter on a bilateral basis. 	<p>Actioned</p> <p>Ongoing</p>	<p>To be superseded by Draft Conclusion 8/8</p>
<p>CONCLUSION 9/16: — REGION-WIDE TRAFFIC SAMPLE AS BASIS FOR FOLLOW-UP AGAINST INCORRECT FLIGHT PLAN FILING</p> <p>That, considering the need to identify operators who are filing flight plans incorrectly indicating RVSM approval status, traffic samples from all MID RVSM States will be required as the basis for a survey and regulatory action against fraudulent filing of flight plans.</p>	<p>Ongoing</p>	<p>To be superseded by Draft Conclusion 8/7</p>

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
<p>CONCLUSION 9/17: METHODOLOGY TO ERADICATE MULTIPLE REPETITIONS AND NON-RECEIPT OF ATS MESSAGES</p> <p>That, the MID Region adopts the working methodology as described in Appendix 5G to the report on Agenda Item 5 in order to identify and remedy the inconsistencies related to the multiple repetitions and non-receipt of ATS messages.</p>	Actioned	To be superseded by Draft Conclusion 8/7
<p>CONCLUSION 9/18: ESTABLISHMENT OF AN INTEGRATED INITIAL FPL PROCESSING SYSTEM (IFPS) IN THE MID REGION</p> <p>That,</p> <ul style="list-style-type: none"> a) the concept of establishment of an Integrated Initial Flight Plan Processing System (IFPS) in the MID Region is supported by MID States; and b) a feasibility study for the Implementation of an IFPS in the MID Region be carried out. <p>Note: this study will be led by Bahrain with the cooperation of all concerned parties, in coordination with ICAO.</p>	Ongoing	
<p>CONCLUSION 9/19: REPORTING OF ATS INCIDENTS</p> <p>That,</p> <ul style="list-style-type: none"> a) reporting of incidents/accidents will be in accordance with provisions of Annex 13-Aircraft Accident and Incident Investigation and Procedures for Air Navigation Services-Air Traffic Management (PANS-ATM, Doc 4444); and b) States share information on ATM accidents and incidents. 	Ongoing	To be superseded by Draft Conclusion 8/10
<p>DECISION 9/20: DISCONTINUATION OF THE ATS INCIDENT ANALYSIS TASK FORCE</p> <p>That, in view of the lack of support and enthusiasm from States to provide relevant and comprehensive data on ATS Incidents in the region:</p> <ul style="list-style-type: none"> a) MIDANPIRG dissolves the ATS Incident Analysis Task Force; b) the ATM/SAR/AIS Sub-Group be requested to follow up on the ATS incident trends in the region and its impact on safety of air navigation; and c) IATA continues to update the ATM/SAR/AIS Sub-Group on ATS incident trends noted within the framework of its safety enhancement mechanisms. 	Action taken	

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
<p>DECISION 9/21: ASSIGNMENT OF SSR CODES IN THE MID REGION</p> <p>That,</p> <ul style="list-style-type: none"> a) the updated list of SSR codes assignment system for domestic and transit purposes for the MID Region indicated at Appendix 5H to the report on Agenda Item 5 replaces the existing requirements indicated in the MID FASID Document; and b) taking into account acute shortage of SSR codes being experienced in adjacent Participating Areas (PAs) and the sustained traffic growth in the MID Region, the ATM/SAR/AIS Sub-Group reviews, as appropriate, the allocation of SSR codes in the region in order to ensure that the requirements of all FIRs/ACCs continue to be met. 	<p>Ongoing</p>	
<p>CONCLUSION 9/22: AIRWORTHINESS AND OPERATIONAL APPROVAL FOR B-RNAV, RNP 10 AND RVSM OPERATIONS IN THE MID REGION</p> <p>That, with a view to facilitate and harmonize the airworthiness and operational approvals procedures for BRNAV, RNP 10 and RVSM operations in the MID Region:—</p> <ul style="list-style-type: none"> a) the European Joint Airworthiness Authority (JAA) Temporary guidance Leaflet No.2, guidance material on airworthiness approval and operational criteria for the use of navigation systems in the European airspace designated for Basic RNAV operations be endorsed as the official guidance material for airworthiness and operational approvals for B-RNAV operations in the MID Region; b) the guidance material developed by the United States, Federal Aviation Administration (FAA) Order No.8400.12 be used by States for the development of RNP 10 operational approval process; and c) the guidance material contained in both FAA Interim Guidance 91-RVSM and JAA Temporary Guidance Leaflet TGL No. 6 as amended for issuing Airworthiness and Operational Approval for aircraft and operators intending to operate within a designed RVSM airspace be adopted. 	<p>Action taken</p>	

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
<p>CONCLUSION 9/23: DATA FOR SUSTAINED SAFETY ASSURANCE OF RNP AND RVSM WITHIN THE MID REGION</p> <p>That, considering the on-going requirement for safety assurance related to RVSM and RNP operations within the Middle East Region,</p> <ul style="list-style-type: none"> a) all States report data and incidents necessary for performing collision risk calculations required for sustained safe RVSM operations to the MID RMA*. The data will include, but not necessarily be limited to: <ul style="list-style-type: none"> i) assigned altitude deviations of 300 ft or more (monthly); ii) total number of IFR movements (monthly); iii) average time per movement spent in the level band FL290 - FL410; iv) ATC/ATC coordination failures (monthly); and v) traffic data (as requested by the MID RMA)*; b) monitoring States report navigational errors and traffic data in accordance with the Letter of Agreement concerning monitoring associated with RNP; c) air operators maintain procedures for reporting of turbulence; d) States report data on approval of operators and aircraft for RVSM operations (monthly); and e) the MID RMA* ensures that further processing and evaluation of this data within its Terms of Reference and identifies or develops methodologies for assessing risk associated with operational procedures prevailing within the MID Region. <p>* MID RMA to be established</p> <p>Note: Until the MID RMA is established, States forward to the ICAO MID Regional Office any relevant information likely to have a negative impact on the safe operations of RNP and RVSM in the region.</p>	<p>Ongoing</p>	
<p>DECISION 9/24: STATUS OF IMPLEMENTATION OF ICAO REQUIREMENTS IN THE SEARCH AND RESCUE FIELDS</p> <p>That,</p> <ul style="list-style-type: none"> a) the Secretariat, in consultation with concerned States, regularly updates the status of implementation of Search and Rescue provisions as indicated in the MID Basic Air Navigation Plan; and b) the updated list indicating the status of implementation of SAR provisions be indicated in the MID FASID Document. 	<p>Action taken</p>	

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
<p>CONCLUSION 9/28: HARMONIZATION OF AIS, MET AND FPL INFORMATION</p> <p>That, in any approach to AIS automation, States should take the necessary measures to enable users to access both AIS and MET information from a common interface based on the flight plan entry, to support combined AIS/MET/FPL pre-flight briefing.</p>	Ongoing	Action by States
<p>CONCLUSION 9/29: IMPLEMENTATION OF QUALITY SYSTEM WITHIN MID STATES' AISs</p> <p>That, with a view to obtain information from MID States regarding the status of implementation of quality system within their Aeronautical Information Service and/or the difficulties they face to implement the required system:</p> <ul style="list-style-type: none"> a) ICAO MID Regional Office carries out a survey on the implementation of quality system; and b) the results of this survey should serve as a basis for the development of a Quality Management Plan for the MID Region to guide and assist States in the implementation of a Quality Management System in conformity with the ISO 9000 series of standards. 	Action taken	
<p>CONCLUSION 9/30: AIS/MAP TIMELINES FOR THE MID REGION</p> <p>That, as a support to the global ATM operational concept, the AIS/MAP timelines at Appendix 5J to the report on Agenda Item 5, be used in the MID Region as an internal planning tool for the implementation of specific AIS/MAP related subjects.</p>	Action taken	To be superseded by Draft Conclusion 8/27
<p>DECISION 9/31: AIS/MAP TRAINING ACTION PLAN FOR THE MID REGION</p> <p>That, with a view to assist and support the activities of the CNS/ATM Human Resources Planning and Training Task Force, the AIS/MAP Task Force should:</p> <ul style="list-style-type: none"> a) identify the AIS/MAP training resources already available in the MID Region; and b) propose an AIS/MAP training action plan for the MID Region 	Ongoing	To be deleted (covered by TOR of the AIS/MAP TF. Moreover the CNS/ATM HR&P will be disbanded).
<p>DECISION 9/32: REVISED TERMS OF REFERENCE AND WORK PROGRAMME OF THE AIS/MAP TASK FORCE</p> <p>That, revised Terms of Reference and Work Programme of the AIS/MAP Task Force be adopted as shown at Appendix 5K to the report on Agenda Item 5.</p>	Action taken	To be superseded by Draft Conclusion 8/28

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
<p>DECISION 9/41: MID REGIONAL CONTINGENCY PLAN FOR ATM/CNS</p> <p>That,</p> <p>a) the relevant subsidiary bodies of MIDANPIRG revise their Terms of Reference (TOR) to include the development of regional guidance material leading to a MID Regional Contingency Plan for ATM including supporting CNS elements;</p> <p>b) the MID Regional Contingency Plan be updated by the relevant MIDANPIRG subsidiary bodies on a regular basis.</p>	Ongoing	To be superseded by Draft Conclusion 8/12
<p>CONCLUSION 9/42: IMPLEMENTATION OF D-ATIS AND PDC IN THE MID REGION</p> <p>That, MID States not having done so, and where needs justify, are urged to implement in their international airports the dissemination of the ATIS and Pre-Departure Clearance via data link (D-ATIS and PDC).</p>	Ongoing	
<p>CONCLUSION 9/59: MID BASIC ANP AND FASID (Doc 9708)</p> <p>That, ICAO gives priority to the publication of the MID BASIC ANP and FASID in English and Arabic versions.</p>	Ongoing	Document in final phase of publication
<p>CONCLUSION 9/60: AMENDMENT PROPOSAL TO THE MID BASIC ANP AND FASID</p> <p>That, the ICAO MID Regional Office, on behalf of MIDANPIRG, initiates an amendment proposal to the MID Basic ANP and FASID in order to update the AIS, AOP, ATM, CNS and MET regional requirements and reflect the changes made to the FASID Tables.</p>	Ongoing	Pending publication of the official version of Doc 9708
<p>CONCLUSION 9/61: AMENDMENT TO THE FORM USED FOR THE IDENTIFICATION, ASSESSMENT AND REPORTING OF AIR NAVIGATION DEFICIENCIES</p>		
<p>That, with a view to analysing the rationale for non-elimination of air navigation deficiencies, ICAO considers the amendment of the uniform methodology for the identification, assessment and reporting of air navigation deficiencies to incorporate the revised form as in Appendix 6A to the report on Agenda Item 6.</p>	Actioned	Noted by the Council (need more experience from MID Region before global use)

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
<p>CONCLUSION 9/62: REVIEW OF THE REQUIREMENTS PERTAINING TO ATS ROUTES</p> <p>That, taking into consideration the unlikelihood to implement certain ATS routes in the MID Region:</p> <ul style="list-style-type: none"> a) IATA reconsiders its requirements for implementation of some ATS routes in the MID Region; and b) the ATM/SAR/AIS Sub-Group takes into account the concerns of States regarding some ATS route requirements which can not be implemented. 	<p>Ongoing</p>	<p>To be superseded by Draft Conclusion 8/1</p>
<p>CONCLUSION 9/63: DEVELOPMENT OF A MID REGION'S AIR NAVIGATION DEFICIENCIES DATABASE</p> <p>That, ICAO MID Regional Office:</p> <ul style="list-style-type: none"> a) develops an air navigation deficiencies database for the MID Region; b) develops a secure process for managing this database on the Internet; c) gives the possibility of controlled on-line introduction of updated information by States for their respective deficiencies; and d) allows other authorized users on-line access to view the information contained in the database. 	<p>Action taken</p> <p>Ongoing</p>	<p>Will be reviewed by the ANS WG/2 meeting</p>

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
<p>CONCLUSION 9/64: ELIMINATION OF AIR NAVIGATION DEFICIENCIES IN THE MID REGION</p> <p>That,</p> <ul style="list-style-type: none"> a) States review their respective lists of identified deficiencies and formulate and forward an action plan for rectification of outstanding deficiencies to the ICAO MID Regional Office for review; b) States increase their efforts to overcome the delay in mitigating air navigation deficiencies identified by MIDANPIRG and explore ways and means to eliminate deficiencies by reliable ways of funding; c) States are encouraged to set up an internal group of experts to examine the list of deficiencies and take appropriate actions with a view to recommend to their higher Civil Aviation Authorities solutions for elimination of deficiencies; d) States experiencing difficulties in financing the elimination of safety-related deficiencies may wish to take advantage of the funding opportunity offered by the International Financial Facility for Aviation Safety (IFFAS); e) States be encouraged to foster the creation of regional and sub-regional cooperation and, wherever feasible, partnership initiatives with other States, users, air navigation service providers, industry and financial institutions to improve the safety of international civil aviation; f) Users of air navigation facilities and services in the MID Region report to the ICAO MID Regional Office when the remedial action on a deficiency has been taken; g) ICAO continues to provide assistance to States for the purpose of rectifying deficiencies; and h) when required, States request ICAO assistance through Technical Co-operation Programme and/or Special Implementation Projects (SIP). 	<p>Ongoing</p>	

ATM/SAR/AIS SG/8
Report on Agenda Item 3

REPORT ON AGENDA ITEM 3: IMPROVEMENT OF THE MID ATS ROUTE NETWORK

3.1 *Review of the ATS route network*

3.1.1 Under this agenda item, the meeting recalled that the President of the ICAO Council approved on 5 June 2005 the proposal for amendment of the MID Basic Air Navigation Plan (Serial No. MID 05/01-ATS).

3.1.2 The meeting noted that after the approval of the Amendment proposal MID 05/01-ATS, it was noted with concern that some of the route designators which are included in both the APAC and MID Basic ANPs are not compliant with Annex 11 provisions i.e. G/UG787E, G/UG787W and UP318N. Accordingly, the MID Regional Office coordinated with Oman, Pakistan and India through ICAO APAC Regional Office, to alleviate this deficiency and the designators G/UG787E, G/UG787W were replaced by G/UG216 and A/UA454 respectively. These changes will be reflected in the next proposal for amendment of the MID Basic ANP.

3.1.3 The ATS route network for the MID Region, as indicated in the MID Basic ANP has been revised to reflect the requirements of the Region. In this regard, initiatives/actions have been taken by States in consultation with the users and ICAO with a view to improve safety and efficiency of air navigation in the Region. To this effect, an ATS route coordination meeting was held in Damascus, 1-2 February 2006 with a view to implement/activate a number of ATS Routes between Iraq, Syria and Turkey and to strengthen the coordination procedures in the field of ATM between the mentioned States.

3.1.4 The meeting noted that the reactivation of the ATS routes UP975 (Eastbound) and UL602 was one of the main subjects addressed by the Damascus meeting. However, due to the non-availability of reliable ATS Direct Speech Communications between Damascus and Baghdad ACCs, the meeting noted with concern that these two important routes have not yet been fully implemented. Nevertheless, IATA mentioned that the route UP975 is partially implemented within Baghdad FIR (till Baghdad international airport) and requested Syria to show more flexibility with the problems of ground/ground communications with Baghdad ACC since a dialing telephone line is already operational and could be used with some difficulties. The Syrian delegates confirmed that the presence of the telephone line. However, it was highlighted that in many occasions they don't receive any reply when dialing the number. Accordingly, and based on a proposal made by Syria, the meeting agreed that another informal ATS route coordination meeting between Iraq, Syria, Turkey and IATA is to be convened to address the pending issues related to the implementation of ATS routes within Baghdad and Damascus FIRs.

3.1.5 The meeting noted that for harmonization purpose and with a view to simplify flight planning and chart presentation, the designator of the route segments ELEXI-DEIR ZZOR-ALEPPO-NISAP was changed from UB402 to UM861, which is used for the continuation of this route in Ankara FIR.

3.1.6 The meeting supported also the activation of ATS route G202 within Baghdad FIR, which requires further coordination between Baghdad and Tehran ACCs.

3.1.7 The meeting recalled that MIDANPIRG/9 noted that the majority of the deficiencies in the ATM field are related to the non-implementation of ATS routes listed in the MID Basic ANP. Accordingly, the need to review some of the requirements of the MID Basic ANP pertaining to ATS routes, which could not be implemented, was expressed and MIDANPIRG/9 agreed to the following Conclusion:

ATM/SAR/AIS SG/8
Report on Agenda Item 3

CONCLUSION 9/62: REVIEW OF THE REQUIREMENTS PERTAINING TO ATS ROUTES

That, taking into consideration the unlikelihood to implement certain ATS routes in the MID Region:

- a) *IATA reconsiders its requirements for implementation of some ATS routes in the MID Region; and*
- b) *the ATM/SAR/AIS Sub-Group takes into account the concerns of States regarding some ATS route requirements which can not be implemented.*

3.1.8 Based on the above, the meeting reviewed the requirements of the MID ATS route network and agreed that the revised version of the MID Basic ANP at **Appendix 3A** to the report on Agenda Item 3 be presented to MIDANPIRG/10 for endorsement before the issuance of the appropriate proposal for amendment of the MID Basic ANP. The meeting supported the proposal made by the Secretariat to delete the ATS routes, which have not been implemented since long time and which are listed in the list of air navigation deficiencies from the MID Basic ANP and to transfer them to a separate file called "Future ATS Route requirements" used for planning purpose within the ATM/SAR/AIS Sub Group framework, as at **Appendix 3B** to the report on Agenda Item 3. Accordingly, the meeting considered that the action required by MIDANPIRG/9 Conclusion 9/62 has been taken and proposed to delete this conclusion.

3.1.9 Accordingly, the meeting agreed to the following Draft Conclusion, which will replace and supersede MIDANPIRG/9 Conclusion 9/62:

DRAFT CONCLUSION 8/1: MID ATS ROUTE NETWORK

That, pending MIDANPIRG/10 approval:

- a) *the MID Basic ANP Table ATS 1 be amended in accordance with approved procedures to reflect the changes agreed by the ATM/SAR/AIS Sub Group as at **Appendix 3A** to the report on Agenda Item 3; and*
- b) *the list of Future ATS Route requirements at **Appendix 3B** to the report on Agenda Item 3, be used within the framework of the ATM/SAR/AIS Sub Group for future improvements of the MID ATS route network.*

3.1.10 Based on the outcome of the second Inter-Regional Coordination Meeting on interface issues between APAC, EUR and MID Regions (IRCM/2) held in Paris, 11-14 September 2006 and upon a proposal from Turkey, it is proposed, subject to approval by Iran, to create a new route between ARI (Agri in Turkey) and NT (Nakhchivan) in Azerbaijan through Tehran FIR. The meeting agreed that this new route be reflected in the list of future ATS route requirements. The meeting also supported the proposal of the IRCM/2 meeting related to the urgent need for Afghanistan and Pakistan to adjust the Minimum Enroute Altitude (MEA) on ATS route P628/G792 from FL320 to FL300 for the sake of harmonization with Indian FIRs and to accommodate additional flight level.

3.1.11 IATA highlighted the urgent need for airspace users to implement some ATS routes in the Indian Ocean area. It was recalled in this regard that the ATM/SAR/AIS SG/7 meeting agreed that coordination should be carried out with the ICAO APAC Office with a view to extend ATS Route N/UN764 from SOCATRA to DADAR as follows:

ATM/SAR/AIS SG/8
Report on Agenda Item 3

<p>NOBSU 171554N 0431318E RIYAN (RIN) SOCATRA SUHIL VUTAS P2 DADAR</p>	}	Mumbai FIR
----------------------------------------------------------------------------------------------------------------------------	---	-------------------

3.1.12 As the ATS routes through the Indian Ocean expect increase in traffic, especially during the Haj season, IATA requested that concerned States, who have not yet done so, expedite the implementation of the five (5) major ATS routes in that area as reflected in the MID basic ANP (UL322, UM574, UN764, UN555 and UP323). It was also requested that coordination be carried out with the ICAO APAC Regional Office with a view to expedite the implementation of these routes within Mumbai and/or Male FIRs. Oman raised safety concern about the implementation of the route UL322 which crosses a number of busy airways and imposes flight level restrictions on some other routes. Furthermore, it was mentioned that the problem of communication and surveillance of aircraft over this area is not yet totally resolved. However, the meeting noted that trials are under progress over the Indian Ocean area for the implementation of ADS-B and CPDLC, which will lead to improved communication and surveillance.

3.1.13 Based on the above the meeting agreed that the ICAO APAC Regional Office be requested to implement UL322 within Mumbai FIR and that this issue be addressed by the next South West Asia ATS Coordination Group (SWACG meeting) which is expected to be held during 2007.

3.1.14 The meeting noted with appreciation that an ATS coordination meeting is to be held in Cairo Egypt, 10-11 December 2006 between Egypt, Jordan, Saudi Arabia and IATA in order to discuss the possible implementation of new routes with a view to improve the MID ATS route network.

3.1.15 UAE raised concern about the mechanism used for the amendment of the Basic Air Navigation Plan to reflect the changes of the ATS route network and suggested that the list of ATS routes be transferred from the Basic ANP to the FASID. In this regard, it was recalled that the IRCM/2 addressed this issue and agreed that the current ATS route network planning process is a very cumbersome and lengthy exercise, requiring each time a formal process of amendment to the Air Navigation Plan (Volume 1). This process usually takes a significant amount of time and does not meet the needs of States and airspace users. Taking into consideration the new and rapidly changing environment, a significant revision of the current regional ANPs philosophy is required in order to reconcile it with the ATM operational concept and the new Global ANP provisions.

3.2 Allocation of five Letter Name Codes (5 LNCs) in the MID Region

3.2.1 The meeting recalled that for more than two years a pilot phase for the use of the ICAO Five-Letter Name Codes and Route Designator system (ICARD) by a number of MID States has started (Afghanistan, Bahrain, Egypt, Iran, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, UAE and Yemen). The designated airspace managers have been granted secured access to the ICARD system with a view to select name-codes from the MID reserved list and request approval from the ICAO MID Regional Office database manager.

3.2.2 The meeting expressed its appreciation to EUROCONTROL for hosting the ICARD system and reiterated that the spirit of cooperation which has always prevailed between the MID Region States and EUROCONTROL cannot be over-emphasized.

ATM/SAR/AIS SG/8
Report on Agenda Item 3

3.2.3 The meeting recognized that the use of the ICARD system for the allocation of 5LNCs has been very efficient. ICARD was also an excellent tool for the elimination of duplicate codes. However, this work has to be pursued to eliminate all the pending duplicate and non-ICAO codes.

3.2.4 Each State was requested to check its list of allocated 5LNCs and inform the Secretariat of any necessary update. Special attention was given to the duplicate and non-ICAO codes with a view to replace them with codes from those available in the MID reserve list.

3.2.5 The meeting was also apprised of the outcome of ALLPIRG/5 meeting related to the development and availability of the ICAO Global ANP database and associated air navigation planning services including the ICAO Global five letter name code system.

3.3 Review of the report of the Special Civil/Military Coordination Meeting (SCMCM)

3.3.1 The meeting recalled that the Special Civil/Military Coordination Meeting (SCMCM) held in Sana'a, Yemen, from 18 to 19 June 2006, discussed 3 main agenda items:

- Coordination between Military Authorities and ATS Authorities;
- Military activities over the high seas; and
- Uncoordinated flights over the Red Sea Area.

Coordination between Military Authorities and ATS Authorities

3.3.2 The meeting made reference to the LIM MID (COM/MET/RAC) RAN Meeting, Cairo 7-17 January 1996 and agreed that there is a need to reduce restrictions imposed on the operation of civil aircraft by military operations. With due regard to the need for designated airspace for military activities, increased efforts should be made to have such areas changed to locations that would not interfere with the optimum ATS routes for civil aircraft operations. It was also agreed that, in cases where relocation of areas used for military activities would prove impossible, promulgation of the actual hours of activity, accompanied by a statement that the areas are available for use by civil aircraft outside those hours, would alleviate existing problems to some extent. However, day-to-day or, better still, hour-to-hour coordination between military operational control units and civil ATS units would allow for a flexible use of common airspace. It was noted in this regard that the concept of Flexible Use of Airspace, through the optimization and equitable balance in the use of airspace between Civil and Military users is facilitated through both strategic coordination and dynamic interaction.

3.3.3 The meeting noted with appreciation the good coordination observed in Oman, Saudi Arabia and Yemen between the ATS and Military authorities, which led, inter-alia, to the implementation of more direct/economic ATS routes. Accordingly, it improved the airspace capacity, reduced the air traffic controllers' workload and more generally improved the air navigation safety and efficiency. The meeting noted that traffic is growing rapidly in the MID Region and particularly in Saudi Arabia, especially during the Haj season (10 to 17 % annually). The good civil/military coordination was one of the pre-requisite to face this important traffic growth. In fact, more than 30 direct/economic routes were established.

3.3.4 Based on the foregoing, the meeting urged States to establish/improve the required coordination between ATS and Military Authorities and to report any incident relating to the lack of civil/military coordination. Accordingly, the meeting agreed to the following Draft Conclusion:

ATM/SAR/AIS SG/8
Report on Agenda Item 3

DRAFT CONCLUSION 8/2: CIVIL/MILITARY COORDINATION

That, with a view to ensure effective/optimum civil/military co-ordination and joint use of airspace with a maximum degree of safety, regularity and efficiency of international civil air traffic, States which have not yet done so, are urged to:

- a) *implement Assembly Resolution A35-14 Appendix P and the provision of Annexes 2, 11 and 15 as well as LIM MID (COM/MET/RAC) RAN Meeting 1996, Recommendations 2/9, 2/10 and 2/13;*
- b) *give due consideration to the urgent establishment of civil/military coordination bodies for airspace management and air traffic control;*
- c) *arrange for letters of agreement (LOAs) to be signed between ATS authorities and Military authorities in order to establish coordination procedures for the exchange of information; and*
- d) *ensure that the Military authorities are:*
 - i. *fully involved in the airspace planning and management process;*
 - ii. *aware of the new developments in civil aviation; and*
 - iii. *involved in national, regional and international aviation meetings, workshops, seminars and training sessions, as appropriate.*

Military activities over the high Seas

3.3.5 On the subject of military activities over the high Seas, the meeting recalled that Assembly Resolution A35-14 Appendix P, states that *“the regulations and procedures established by Contracting States to govern the operation of their state aircraft over the high seas shall ensure that these operations do not compromise the safety, regularity and efficiency of international civil air traffic and that, to the extent practicable, these operations comply with the rules of the air in Annex 2”*.

3.3.6 The meeting recalled also Annex 11 paragraph 2.17.1, which states that *“the arrangements for activities potentially hazardous to civil aircraft, whether over the territory of a State or over the high seas, shall be coordinated with the appropriate air traffic services authorities”*. It was also highlighted that Annex 11 paragraph 2.17.1.1, recommends that *“if the appropriate ATS authority is not that of the State where the organization planning the activities is located, initial coordination should be effected through the ATS authority responsible for the airspace over the State where the organization is located”*.

3.3.7 The meeting made reference to Doc 9554 and recognized that the civil/military coordination is necessary regardless of whether the activities take place over the territories of States, over the high seas, or over territories of undetermined sovereignty, and whether the military and ATS authorities belong to the same State or different States. Coordination with regard to activities potentially hazardous to civil aircraft operations over the high seas should be effected even if the States whose military organization and ATS authorities are concerned find themselves temporarily in diplomatic disagreement. If direct coordination with the appropriate ATS authorities via aeronautical or diplomatic channels is not possible, the coordination should be effected with the assistance of the appropriate ICAO Regional Office or the ATS authorities of another State.

ATM/SAR/AIS SG/8
Report on Agenda Item 3

3.3.8 The meeting recognized that the issue of Civil/Military coordination in general and especially the issue of Military flights using the airspace over the high seas was raised with concern repeatedly in the MID Region. It was recalled that the LIM MID (COM/MET/RAC) RAN Meeting 1996, addressed the issues relating to civil/military coordination specific for the Gulf area where extra-regional naval units operated and where military aircraft operated from such naval units. The meeting recognized that difficulties could arise in effecting coordination adequately when some of the units involved were from outside the region, as was the case in the Gulf area. For the safety of civil aircraft operations, it was considered essential that formal civil/military coordination arrangements be established at the operational level between extra-regional naval units and air traffic control units in the adjacent States. The meeting was of the opinion that this aspect of civil/military coordination was not adequately covered in ICAO guidance material. It was suggested that any perceived violation of ICAO provisions by military aircraft should, at the earliest possible time, be brought to the attention of the ATS unit concerned and the State responsible for military aircraft, if known, to permit a thorough investigation. Accordingly, the meeting invited ICAO to develop additional guidance material relating to civil/military coordination between air traffic services and military units from other States conducting operations potentially hazardous to civil aircraft.

3.3.9 The meeting noted with concern that uncoordinated military activities continue to take place over the Gulf area, the Arabian Sea and Indian Ocean. In this regard, the meeting recalled that a long range missile firing test was conducted by Pakistan in the Arabian Sea and Indian Ocean on 29 and 30 April 2006. This military activity took place in a corridor with an unlimited altitude extending outside Karachi FIR and the airspace over high seas covering parts of Muscat, Sana'a and Mumbai FIRs. Accordingly, several international oceanic routes were unavailable. This affected the safety and efficiency of air navigation in these areas.

3.3.10 The meeting noted the concerns of Yemen regarding the presence of uncoordinated foreign Military operations/activities over the Gulf of Aden and Arabian Sea within Sana'a FIR. It was also noted with concern that such military flights cross many airways and fly along the boundary line of Sana'a FIR crossing many transfer of control points and infringing RVSM transition area without complying with ATC instructions and often without even communication with Sana'a ACC.

3.3.11 The meeting noted also the concerns raised by the continuing presence of military aircraft operating in the Muscat FIR. It was mentioned in this regard that the Muscat ACC faces ongoing problems with the control of foreign military operators using the airspace of the Muscat FIR. Operations take place between the Muscat and Karachi FIRs and often involve a large "racetrack" pattern being flown between the two FIRs. These "racetracks" cross many busy international airways. The meeting noted with concern that the Operators of these flights often do not comply with ATC instructions, which means that the other operators have to be either vectored well away from these flights or required to change flightlevel, which has a negative financial effect on these operators, in addition to the safety concerns.

3.3.12 The meeting also noted the concerns of Iran I.R. of regarding the continuous presence of uncoordinated/military flights over the Gulf area within Tehran FIR.

3.3.13 The meeting recognized that sovereignty is not observed over high seas. However, it was emphasized that States are responsible for ensuring the safety of air navigation over the high seas within their FIRs. The meeting recalled Article 3 (a) of the Convention on International Civil Aviation and recognized that the Convention exempts State aircraft from compliance with ICAO SARPs. However, Military aircraft must exercise "due regard" for the safety of navigation of civil aircraft.

ATM/SAR/AIS SG/8
Report on Agenda Item 3

3.3.14 The meeting was informed that, as a matter of policy, US military aircraft normally follow ICAO procedures. However, if operational situations do not lend themselves to following ICAO flight procedures, then those operations will be conducted with “Due Regard” for the safety of navigation of all air and surface traffic. It was mentioned in this respect that flight under the “Due Regard” option obligates the aircraft commander to follow certain conditions to separate his/her aircraft from all other aircraft. In this regard, before a U.S. military aircraft commander can declare “Due Regard”, there are certain conditions that must be met:

- Aircraft shall be operated in VMC; or
- Aircraft shall be operated within radar surveillance and radio communications of a surface radar facility; or
- Aircraft shall be equipped with airborne radar that is sufficient to provide separation between themselves, aircraft they may be controlling, and other aircraft; or
- Aircraft shall be operated outside controlled airspace.

3.3.15 Accordingly, the meeting noted that the “Due Regard” prerogative is a right reserved for all State aircraft allowing aircraft commanders to complete their missions and that US military aircraft commanders have a thorough understanding of when and how to declare “Due Regard”.

3.3.16 Based on the above, the meeting agreed that:

- a common understanding between civil and military has to be observed/developed;
- positive and effective communication between civil and military has to be established/maintained; and
- a mechanism to ensure that data is reported in a timely manner when an incident occurs and feedback information is sent back to the origin.

3.3.17 Accordingly, the meeting agreed to the following Draft Conclusion:

DRAFT CONCLUSION 8/3: COORDINATION OF FLIGHTS OPERATING OVER HIGH SEAS

That, taking into consideration that the Convention on International Civil Aviation shall be applicable only to civil aircraft:

- a) *all parties involved are urged to ensure that proper coordination between the ATS authorities and foreign military units operating over the high seas be carried out to the extent practicable;*
- b) *State aircraft operating in airspace over high seas, should:*
 - i) *adhere, to the extent practicable, to ICAO provisions; or*
 - ii) *operate with “Due Regard” for the safety of navigation of civil aircraft where there are operational situations that do not lend themselves to ICAO flight procedures.*
- c) *States report any incident relating to uncoordinated flights operating over high seas, in a timely manner (within 15 days) and in accordance with the suggested mechanism illustrated in the flow chart at **Appendix 3C** to the report on Agenda Item 3.*

Uncoordinated flights over the Red Sea Area

3.3.18 The meeting recalled that MIDANPIRG/8 under Conclusion 8/22 endorsed the procedures which were elaborated for the handling of uncoordinated flights over the Red Sea area.

ATM/SAR/AIS SG/8
Report on Agenda Item 3

3.3.19 The meeting noted with concern that, up to now, problems concerning uncoordinated flights over the Red Sea area are still not resolved. It was highlighted that the agreed procedures which were endorsed by MIDANPIRG/8 and the ICAO Council are not being followed by some flights overflying the Red Sea area, thus having a negative impact on the safety of aircraft in the region, in particular, within and adjacent to Jeddah and Sana'a FIRs.

3.3.20 The meeting noted with appreciation that Sana'a ACC, with the support of the radar used for monitoring, took pro-active actions with a view to avoid the occurrence of accidents between uncoordinated flights although they were flying beyond Sana'a FIR. Two incidents of this nature were recorded and brought to the attention of the meeting.

3.3.21 The meeting discussed the causes of occurrence of such problems and agreed that the main reason is the non-adherence of some operators of uncoordinated flights to the promulgated procedures. The non involvement of some concerned AFI States in the process of handling the uncoordinated flights in compliance with the promulgated procedure was also highlighted. In this respect, the meeting noted the difficulties Yemen is facing over Sana'a RVSM transition areas.

3.3.22 Based on the statistics provided by Yemen, the analysis carried out by IATA showed that most of the IATA members are following the procedures (83) while only (6) maintained the correct assigned FLs but did not comply with the contact and (3) of the movements did not comply with published procedures by concerned States (Saudi Arabia, Egypt, Sudan and Yemen). The majority of the non-compliance is filed against the unknown operators.

3.3.23 Based on the above, the meeting reviewed the procedure for the handling of uncoordinated flights over the Red Sea area, as endorsed by MIDANPIRG/8 and agreed that, to the extent practicable, State/military aircraft when flying over the Red Sea area be informed of the procedures to be followed by Civil uncoordinated flights and be requested to take into account the restrictions applicable within RVSM airspace. Accordingly the meeting developed the following Draft Conclusion which is proposed to replace MIDANPIRG/8 Conclusion 8/22:

DRAFT CONCLUSION 8/4: UNCOORDINATED FLIGHTS OVER THE RED SEA AREA

That,

- a) *the procedures at **Appendix 3D** to the report on Agenda Item 3, be followed by all civil uncoordinated flights and, to the extent practicable, to military aircraft operating over the Red Sea area;*
- b) *States, which have not yet done so, publish an AIP Supplement, as soon as possible, for the promulgation of these procedures;*
- c) *IATA continue its effort in ensuring that concerned operators are fully conversant with these procedures;*
- d) *all parties involved, through their proper channels, take appropriate action to ensure that the airspace users be informed of and comply with the agreed procedures; and*
- e) *States:*
 - i) *report without delay all incidents relating to civil uncoordinated flights over the Red Sea Area; and*
 - ii) *report any incident relating to State aircraft operating over the Red Sea Area, in a timely manner (within 15 days) and in accordance with the suggested mechanism illustrated in the flow chart at **Appendix 3C** to the report on Agenda Item 3.*

ATM/SAR/AIS SG/8
Appendix 3A to the Report on Agenda Item 3

TABLE ATS 1 – ATS ROUTES
TABLEAU ATS 1 – ROUTES ATS
TABLA ATS 1 – RUTAS ATS

EXPLANATION OF THE TABLE

Column

- 1 Designator of ATS route.
- 2 Significant points defining the ATS routes. Only prominent locations have been listed. Additional points where facilities are provided to complete navigational guidance along a route, but not otherwise marking significant characteristics of the route (change of heading of centre line, intersection with other routes, etc.) have normally not been included. Locations shown in parentheses indicate significant points outside the Region.

Note 1. Not representing the operator's requirements. Operator's required route and/or nav aids are shown in square brackets ([]).

Note 2. Subject to further study. Including the associated navigation aid coverage.

Note 3. Subject to military agreement.

Note 4. Not acceptable at present.

Note 5. At present, implementation possible only during specific periods (e.g. weekends, nights, etc., as published).

Note 6. At present, implementation of the RNAV route only possible above FL 300, or as published.

Note 7. Unidirectional use.

Whenever reference to name States is made in Table ATS 1 in connection with the above notes, the following abbreviations, based on those indicated in Location Indicators (Doc 7910), are used:

HE	Egypt
HL	Libyan Arab Jamahiriya
HS	Sudan
LC	Cyprus
LL	Israel
OA	Afghanistan
OB	Kingdom of Bahrain
OE	Saudi Arabia
OI	Iran, Islamic Republic of
OJ	Jordan
OK	Kuwait
OL	Lebanon
OM	United Arab Emirates
OO	Oman
OP	Pakistan
OR	Iraq
OS	Syrian Arab Republic
OT	Qatar
OY	Yemen

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

A145	(LUXOR) WEJH GASSIM KING FAHD	UA145	(LUXOR) WEJH GASSIM KING FAHD
A219	(NAWABSHAH) SERKA 2951.0N 06615.0E KANDAHAR (TERMEZ)	UA219	(NAWABSHAH) SERKA 2951.0N 06615.0E KANDAHAR (TERMEZ)
A408	(ADDIS ABABA) SALEH 14000N 042000E HODEIDAH	UA408	(ADDIS ABABA) SALEH 14000N 042000E HODEIDAH
A411	(CAIRO) SHARM EL SHEIKH PASAM 2730.8N 03455.7E *Note 7(OE) WEJH KING ABDULAZIZ JAZAN SANA'A	UA411	(CAIRO) SHARM EL SHEIKH PASAM 2730.8N 03455.7E *Note 7(OE) WEJH KING ABDULAZIZ JAZAN SANA'A
A412	JERUSALEM * Note 4(OJ) AMMAN ZELAF 3257.0N 03800.0E TANF	UA412	JERUSALEM* Note 4(OJ) AMMAN ZELAF 3257.0N 03800.0E TANF
A413	TESSO 2828.9N 04927.4E VUXAL 2835.5N 04946.1E ALNIN 2840.9N 05001.6E BUSHEHR	UA413	TESSO 2828.9N 04927.4E VUXAL 2835.5N 04946.1E ALNIN 2840.9N 05001.6E BUSHEHR
A414	GITLA 3219.1N 03402.8E (SITIA)	UA414	GITLA 3219.1N 03402.8E (SITIA)
A415	KING KHALID DOHA * Note 5(OE,OB) SHARJAH	UA415	KING KHALID DOHA * Note 5(OE,OB) SHARJAH
A416	ARDABIL RASHT NOSHAHR DASHTE NAZ SABZEVAR	UA416	ARDABIL RASHT NOSHAHR DASHTE NAZ SABZEVAR

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

A417 **PUTRA 165432N 0525631E**
LOTEL 180926N0514103E
IMPOS 183136N 0511848E
SILPA 184953N 0510158E
ASTIN 200410N 0495320E
NONGA 205048N 0492014E
ALRIK 220631N 0482535E
AMBAG 230529N 0474611E
RESAL 240649N 0470427E
KIA 245310N 0464534E

UA417 **PUTRA 165432N 0525631E**
LOTEL 180926N0514103E
IMPOS 183136N 0511848E
SILPA 184953N 0510158E
ASTIN 200410N 0495320E
NONGA 205048N 0492014E
ALRIK 220631N 0482535E
AMBAG 230529N 0474611E
RESAL 240649N 0470427E
KIA 245310N 0464534E

A418 **KUMUN 254000N 0551515E**
PAPAR 2640N 05427E* Note 7
Segment KUMUN-PAPAR(OI and OM)
SHIRAZ

A419 **(ASHGABAT)**
RIKOP 3740.0N 05814.8E
SABZEVAR
TABAS
DARBAND
KERMAN
BANDAR ABBAS
DARAX 260942N 0555300E
SHARJAH
MIADA 245112N 0545736E
MEMBI 243705N 0542631E *See
Note 4 for segment KITAP-MEMBI
KITAP 224928N 0522923E
PURDA 210805N 0510329E
ASTIN 200410N 0495320E
DIXEL 182927N 0481202E
SHARURAH (SHA)
SANA'A
HODEIDA

UA419 **(ASHGABAT)**
RIKOP 3740.0N 05814.8E
SABZEVAR
TABAS
DARBAND
KERMAN
BANDAR ABBAS
DARAX 260942N 0555300E
SHARJAH
MIADA 245112N 0545736E
MEMBI 243705N 0542631E*See
Note 4 for segment KITAP-MEMBI
KITAP 224928N 0522923E
PURDA 210805N 0510329E
ASTIN 200410N 0495320E
DIXEL 182927N 0481202E
SHARURAH (SHA)
SANA'A
HODEIDA

A422 **UROMIYEH**
TABRIZ
PARSABAD
(BAKU)

UA422 **UROMIYEH**
TABRIZ
PARSABAD
(BAKU)

A424 **BAGHDAD**
RAFHA * Note 3
HAIL

UA424 **BAGHDAD**
RAFHA * Note 3
HAIL

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

	MADINAH KING ABDULAZIZ		MADINAH KING ABDULAZIZ
A451	LUXOR ALEBA PORT SUDAN [ASMARA] * Note 1 ASSAB 1304.0 N 04238.8E PARIM 1231.7N 04327.2E ADEN ANGAL 1614.0N 06000.0E (MUMBAI)	UA451	LUXOR ALEBA PORT SUDAN [ASMARA] * Note 1 ASSAB 1304.0N 04238.8E PARIM 1231.7N 04327.2E ADEN ANGAL 1614.0N 06000.0E (MUMBAI)
A453	KABUL HAZNI KANDAHAR ZAHEDAN BANDAR ABBAS GHESHM (KHM) BANDAR LENGEH KISH MIDSI 2641.7N05152.5E PIMAL 2626.5N05122.1E BAHRAIN * Note 7 (OB, OI)	UA453	KABUL HAZNI KANDAHAR ZAHEDAN BANDAR ABBAS GHESHM (KHM) BANDAR LENGEH KISH MIDSI 2641.7N05152.5E PIMAL 2626.5N05122.1E BAHRAIN * Note 7 (OB, OI)
A466	(TERMEZ) AMDAR 3712.5N 06720.6E KABUL3431.1N 06909.1E SANAM 3305.0N 07003.0E (DERA ISMAIL KHAN) (JHANG 3116.0N 07218.0E) (SAMAR 3120.8N 07434.0E) (ASARI 3048.3N 07509.6E)	UA466	(TERMEZ) AMDAR 3712.5N 06720.6E KABUL 3431.1N 06909.1E SANAM 3305.0N 07003.0E (DERA ISMAIL KHAN) (JHANG 3116.0N 07218.0E) (SAMAR 3120.8N 07434.0E) (ASARI 3048.3N 07509.6E)
A777	TONVO 250500N 0563200E BUBAS 245938N 05700 03E NADSO 244957N 0574926E MIXOL 240618N 0592739E VAXIM 231900N 0611100E	UA775	REXOD 211230N 0613830E TUMET 222307N 0595702E KUSRA 231726N 0585102E
A788	SHIRAZ BUSHEHR KAPIP 290217N 0500054E	UA788	SHIRAZ BUSHEHR KAPIP 290217N 0500054E

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

	PATIR 285606N 0492923E WAFRA 2837.3N 04757.5E HAFR AL BATIN HAIL HALAIFAH		PATIR 285606N 0492923E WAFRA 2837.3N 04757.5E HAFR AL BATIN HAIL HALAIFAH
A791	SISIK 2936.0N 03241.E NUWEIBAA KITOT 2902.1N 03450.8E *Note 7 (OE) SOBAS 2756.0N 03904.9E HAIL KING FAHD BAHRAIN *Note 7 Bahrain- Sharjah RATUN 2646.2N 05108.0E SHARJAH IMLOT 2517.1N 05708.1E (JIWANI)	UA791	SISIK 2936.0N 03241.1E NUWEIBAA KITOT 2902.1N 03450.8E *Note 7 (OE) SOBAS 2756.0N 03904.9E HAIL KING FAHD BAHRAIN*Note 7 Bahrain- Sharjah RATUN 2646.2N 05108.0E SHARJAH IMLOT 2517.1N 05708.1E (JIWANI)
B121	RUDESHUR(RUS) RASHT(RST) MEGRI(MGR)	UB121	RUDESHUR(RUS) RASHT(RST) MEGRI(MGR)
B400	SEEB (MCT) ITURA 232351N 0580720E IZKI (IZK) HAIMA (HAI) DAXAM 171612N 0544715E MUTVA 165325N 0543201E IMKAD 155245N 0535147E NODMA 152603N 0533358E RIGAM 143932N 0530414E RAPDO 132317N 0521532E VEDET 120134N 0512410E (MOGADISHU)	UB400	SEEB(MCT) ITURA 232351N 0580720E IZKI (IZK) HAIMA (HAI) DAXAM 171612N 0544715E) MUTVA 165325N 0543201E IMKAD 155245N 0535147E NODMA 152603N 0533358E RIGAM 143932N 0530414E RAPDO 132317N 0521532E VEDET 120134N 0512410E (MOGADISHU)
B401	ARAR BASRAH * Note 3	UB401	ARAR BASRAH * Note 3
B402	ELEXI 3441.5N 04109.0E DIER-ZZOR ALEPPO NISAP 364724N 0363830E	UB402 UM861	ELEXI 3441.5N 04109.0E DIER-ZZOR ALEPPO NISAP 364724N 0363830E

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

		UB403	MANDERA BOMIX 121002N 0502757E ODBEN 123747N 0505648E KAVAN 133250N 0515431E RIGAM 143932N 0530414E
B404	HARGEISA DEMGO 120258N 0483040E PURKA 131208N 0503042E GESIX 134440N 0512823E RIGAM 143932N 0530414E	UB404	HARGEISA DEMGO 120258N 0483040E PURKA 131208N 0503042E GESIX 134440N 0512823E RIGAM 143932N 0530414E
B406	BEN GURION (LARNACA)	UB406	BEN GURION (LARNACA)
B407	KING ABDULAZIZ MAHDI 2026.0N 03739.3E (PORT SUDAN)	UB407	KING ABDULAZIZ MAHDI 2026.0N 03739.3E (PORT SUDAN)
B410	(MUT) CHEKKA *Note 3 (OS) DAMASCUS	UB410	(MUT) CHEKKA *Note 3 (OS) DAMASCUS
B411	METSA 2930.0N 03500.0E AL SHIGAR* Notes2 and 3 ARAR LOVEK 3222.1N 04440.0E NOLDO 3249.5N 04521.5E PAXAT 332056N 0460519E ILAM MALAYER SAVEH [TEHRAN] * Note 1 DEHNAMAK MASHHAD	UB411	METSA 2930.0N 03500.0E AL SHIGAR* Notes2 and 3 ARAR LOVEK 3222.1N 04440.0E NOLDO 3249.5N 04521.5E PAXAT332056N 0460519E ILAM MALAYER SAVEH [TEHRAN] * Note 1 DEHNAMAK MASHHAD
B412	DAMASCUS [AMMAN] * Note 2(OS, OJ) AL SHIGAR [KING ABDULAZIZ]	UB412	DAMASCUS [AMMAN] * Note 2(OS, OJ) AL SHIGAR [KING ABDULAZIZ]
B413	(PORT SUDAN) DANAK 1608.0N 04129.0E HODEIDAH TAIZ ADEN ZIZAN 1151.6N 04539.2E (GAGDO 0725.0N 04827.0E)	UB413	(PORT SUDAN) DANAK 1608.0N 04129.0E HODEIDAH TAIZ ADEN ZIZAN 1151.6N 04539.2E (GAGDO 0725.0N 04827.0E)

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

(PRASLIN)

B415 DOHA
BUNDU 2500.4N 05229.4E
ABU DHABI AUH

B416 KUWAIT
KUPER 2809.4N 05006.0E
IMDAT 2741.0N 05111.0E
ORSAR 2604.5N 05357.5E
SHARJAH

B417 MAHSHAHR
TULAX 2938 53N 04903 01E
DESLU 2928.0N 04901.8E
ALVIX 2919.3N04824.2E
KUWAIT *See Note 3
HAFR AL BATIN
GASSIM
KING ABDULAZIZ

B418 SEMRU 2802.0N 03203.0E
HURGHADA
WEJH
MADINAH
BIR DARB (BDB)
KING KHALID
KING FAHD
PIMAL 2626.5N 05122.1E

B419 [DOHA]
[KING FAHD] * Note3 (OB, OT)
ALVON 2700.2N 05007.2E
SELEG 2801.5N 04922.2E
KUWAIT

B424 ITOLI 152825N 0450927E
SABEL 185200N 05203.7E
OTISA 201000N 0554556E
GISKA 213503N 0574014E

B441 MASHHAD
OTRUZ 363108N 0610956E
ASHGABAT

(PRASLIN)

UB415 DOHA
BUNDU 2500.4N 05229.4E
ABU DHABI AUH

UB416 KUWAIT
KUPER 2809.4N 05006.0E
IMDAT 2741.0N 05111.0E
ORSAR 2604.5N 05357.5E
SHARJAH

UB417 MAHSHAHR
TULAX 2938 53N 04903 01E
DESLU 2928.0N 04901.8E
ALVIX 2919.3N04824.2E
KUWAIT*See Note 3
HAFR AL BATIN
GASSIM
KING ABDULAZIZ

UB418 SEMRU 2802.0N 03203.0E
HURGHADA
WEJH
MADINAH
BIR DARB (BDB)
KING KHALID
KING FAHD
PIMAL 2626.5N 05122.1E

UB419 [DOHA]
[KING FAHD] * Note3 (OB, OT)
ALVON 2700.2N 05007.2E
SELEG 2801.5N 04922.2E
KUWAIT

UB424 ITOLI 152825N 0450927E
SABEL 185200N 05203.7E
OTISA 201000N 0554556E
GISKA 213503N 0574014E

UB441 MASHHAD
OTRUZ 363108N 0610956E
ASHGABAT

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

**B451 DEHNAMAK
BOJNORD (BRD)
DOLOS 375006N 0580200E
(ASHGABAT)**

**UB451 DEHNAMAK
BOJNORD (BRD)
DOLOS 375006N 0580200E
(ASHGABAT)**

**B457 BAHRAIN
ELOS 2548.8N 05142.6E
* Note7 (segment ELOSA-REXOD)
ABU DHABI
LABRI 240344N 0553842E
EGROK 235253N 0560126E
LAKLU 232235N 0570401E
TOLDA 223720N 0583503E
REXOD211230N 0613830E**

**UB457 BAHRAIN
ELOS 2548.8N 05142.6E
* Note7 (segment ELOSA-REXOD)
ABU DHABI
LABRI 240344N 0553842E
EGROK 235253N 0560126E
LAKLU 232235N 0570401E
TOLDA 223720N 0583503E
REXOD 211230N 0613830E**

**B466 NAWABSHAH 2613.1N 06823.1E
KANDAHAR 312900N 0655400E
CHARN 351000N 0610800E**

**B505 LALDO 251806N 0563600E
NADSO 244957N 0574926E
EGTAL 2434 58N 06037 24E**

*Note designator changed from
B525 to B505 as B525 already
assigned in AFI Region)*

**B524 NADSO 244957N 0574926E
ALPOR 2404 42N 06120E**

**B526 (ASMARA)
HODEIDAH
RIYAN
RIGAM 143932N 0530414E**

**UB526 (ASMARA)
HODEIDAH
RIYAN
RIGAM 143932N 0530414E**

**B535 (DJIBOUTI)
ADEN
RIYAN
KAPET 1633 22N 0530614E
SALALAH
MARMUL(MRL)**

**UB535 (DJIBOUTI)
ADEN
RIYAN
KAPET 1633 22N 0530614E
SALALAH
MARMUL(MRL)**

**B538 (GAZIANTEP)
ALEPPO
KARIATAIN
DAMASCUS * Note 2(OS)**

**UB538 (GAZIANTEP)
ALEPPO
KARIATAIN
DAMASCUS * Note 2(OS)**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

B540 TOTOX 215030N 0622230E
ITUDO 2347N 0580113E
PASOV 243841N 0565037E
KUPMA 245148N 0562648E
BUBIN 245742N 0560642E

B544 (GAZIANTEP)
ALEPPO
TANF
TURAIF
AL SHIGAR
HALAIFA
MADINAH
RABIGH
KING ABDULAZIZ
ABHA
NOBSU
SANA'A
KRA

B545 (MUT)
~~BALMA 3428.9N 035 3.0E~~
KHALDEH
~~AMMAN * Note 3&4 (OJ)~~

B549 TAMUD 171700N 0495500E
ITELI 171310N 0502605E
GOGRI 170752N 0510857E
TONRO 165850N 0522235E
PUTRA 165432N 0525631E
LADAR 165324N 0534655E
MUTVA 165325N 0543201E
KIVEL 165306N 0553633E

G183 (KAROL 3252.0N 03229.0E)
PASOS
EL ARISH
TABA
NUWEIBAA

G202 (VELOX 3349.0N 03405.0E)
SILKO 3347.9N 03435.0E
KHALDEH* Note 4 (OS)
DAKWE 3338.9N 03555.0E
DAMASCUS

UB544 (GAZIANTEP)
ALEPPO
TANF
TURAIF
AL SHIGAR
HALAIFA
MADINAH
RABIGH
KING ABDULAZIZ
ABHA
NOBSU
SANA'A
KRA

UB545 (MUT)
~~BALMA 3428.9N 035 3.0E~~
KHALDEH
~~AMMAN * Note 3&4(OJ)~~

UB549 TAMUD 171700N 0495500E
ITELI 171310N 0502605E
GOGRI 170752N 0510857E
TONRO 165850N 0522235E
PUTRA 165432N 0525631E
LADAR 165324N 0534655E
MUTVA 165325N 0543201E
KIVEL 165306N 0553633E

UG202 (VELOX 3349.0N 03405.0E)
SILKO 3347.9N 03435.0E
KHALDEH * Note 4(OS)
DAKWE 3338.9N 03555.0E
DAMASCUS

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

TANF
 MODIK 3328.1N 03901.0E
 RAPLU 3323.0N 04145.5E
 PUSTO 3321.0N 04245.0E
 BGD
 PARUN 3324.2N 04502.0E
 RAGET 3330.8N 04553.8E
 ILAM
 KHORAM ABAD
 ESFAHAN
 NODLA
 BIRJAND
 KAMAR 3239.0N 06044.0E
 DILARAM
 KANDAHAR
 (ZHOB)
 (RAHIM YAR KHAN)

TANF
 MODIK 3328.1N 03901.0E
 RAPLU 3323.0N 04145.5E
 PUSTO 3321.0N 04245.0E
 BGD
 PARUN 3324.2N 04502.0E
 RAGET 3330.8N 04553.8E
 ILAM
 KHORAM ABAD
 ESFAHAN
 NODLA
 BIRJAND
 KAMAR 3239.0N 06044.0E
 DILARAM
 KANDAHAR
 (ZHOB)
 (RAHIM YAR KHAN)

G206 DILARAM
 KABUL
 SABAR 3537.0N 07131.0E
 (PURPA 3656.5N 07524.5E)
 * Note 3

UG206 DILARAM
 KABUL
 SABAR 3537.0N 07131.0E
 (PURPA 3656.5N 07524.5E)
 * Note 3

G208 (PANJGUR)
 ZAHEDAN
 DARBAND
 NODLA 325330N 0545850E
 ANARAK
 TEHRAN
 ZANJAN
 UROMIYEH
 ALRAM 3743.0N 04437.0E
 (SIIRT)

UG208 (PANJGUR)
 ZAHEDAN
 DARBAND
 NODLA 325330N 0545850E
 ANARAK
 TEHRAN
 ZANJAN
 UROMIYEH
 ALRAM 3743.0N 04437.0E
 (SIIRT)

G452 SHIRAZ
 KERMAN
 ZAHEDAN
 (RAHIMYAR KHAN)

UG452 SHIRAZ
 KERMAN
 ZAHEDAN
 (RAHIMYAR KHAN)

G462 BAHRAIN
 PIMAL2626.5N 05122.1E
 * Note 7 between AUH and URITO
 URITO 2616.1N 05148.8 E
 BALUS 2545.9N 05304.4E
 ABU DHABI

UG462 BAHRAIN
 PIMAL2626.5N 05122.1E
 * Note 7 between AUH and URITO
 URITO 2616.1N 05148.8 E
 BALUS 2545.9N 05304.4E
 ABU DHABI

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

**G650 KING ABDULAZIZ
RASKA 1908.0N 03903.0E
(ASMARA)**

**G652 ADEN
IMPOS 183136N 0511848E
DUDRI 190000N 0520000E
TOKRA 220925N 0553350E
TAPDO 2424N 06120 E**

**G660 (PORT SUDAN)
BOGUM 2006.6N 03803.0E
KING ABDULAZIZ
ABU DHABI * Note3 (OE, OM)**

**G662 [DAMASCUS]
[GURIAT] * Notes 1 and 3 (OS,
OJ)
AL SHIGAR
HAIL
GASSIM
KING KHALID**

**G663 KING KHALID
KING FAHD
SHIRAZ
YAZD
TABAS
MASHAD**

**G664 APLON 3352.0N 03204.0E
BEN GURION
AMMAN**

**G665 ABADAN
SHIRAZ * Note 5 (OI)
NABOD 2816.1N 05825.8E
EGSAL 2716.8N 06249.0E
(PANJGUR)**

**G666 SHIRAZ * Note 7 (OI)
LAMERD
LAVAN
ORSAR 2604 .5N 05357.5E
DESDI 2536.1N 05442.5E**

**UG650 KING ABDULAZIZ
RASKA 1908.0N 03903.0E
(ASMARA)**

**UG652 ADEN
IMPOS 183136N 0511848E
DUDRI 190000N 0520000E
TOKRA 220925N 0553350E
TAPDO 2424N 06120 E**

**UG660 (PORT SUDAN)
BOGUM 2006.6N 03803.0E
KING ABDULAZIZ
ABU DHABI * Note3 (OE, OM)**

**UG662 [DAMASCUS]
[GURIAT] * Notes 1 and 3 (OS,
OJ)
AL SHIGAR
HAIL
GASSIM
KING KHALID**

**UG663 KING KHALID
KING FAHD
SHIRAZ
YAZD
TABAS
MASHAD**

**UG664 APLON 3352.0N 03204.0E
BEN GURION
AMMAN**

**UG665 ABADAN
SHIRAZ * Note 5 (OI)
NABOD 2816.1N 05825.8E
EGSAL 2716.8N 06249.0E
(PANJGUR)**

**UG666 SHIRAZ * Note 7 (OI)
LAMERD
LAVAN
ORSAR 2604.5N 05357.5E
DESDI 2536.1N 05442.5E**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

MIADA 245112N 0545736E
ABU DHABI (AUH)

MIADA 245112N 0545736E

G667 **PUTMA 3748.0N 05157.6E**
NOSHAHR
TEHRAN
SAVEH
AHWAZ
ABADAN
ALSAN 2957.1N 04814.9E
FALKA
KUWAIT
WAFRA
MAGALA
KING KHALID
WADI AL DAWASIR
NEJRAN
SANA'A
PARIM 123142.7N 0432712E
(DJIBOUTI)

G668 ZHOB
GHAZNI
RAPTA 3727.0N 06538.0E

G669 KARIATAIN *Note 1,2&3 (OJ)
TONTU 3148.1N 03811.2E
AL SHIGAR
AL JOUF
RAFHA
SOLAT 2909.7N 04638.2E
KUWAIT
SESRA 2908.1N 04854.9E
NANPI 2905.0N 04932.0E
BUSHEHR
VATOB 285126N 0511636E)
[SHIRAZ]

G670 RASHT
LALDA 3817.1N 04943.0E
(BAKU)

G671 TANF
HAWIJA
MOSUL
UROMIYEH * Notes 2 and 3

UG667 **PUTMA 3748.0N 05157.6E**
NOSHAHR
TEHRAN
SAVEH
AHWAZ
ABADAN
ALSAN 2957.1N 04814.9E
FALKA
KUWAIT
WAFRA
MAGALA
KING KHALID
WADI AL DAWASIR
NEJRAN
SANA'A
PARIM 123142.7N 0432712E
(DJIBOUTI)

UG668 ZHOB
GHAZNI
RAPTA 3727.0N 06538.0E

UG669 KARIATAIN *Note 1,2&3 (OJ)
TONTU 3148.1N 03811.2E
AL SHIGAR
AL JOUF
RAFHA
SOLAT 2909.7N 04638.2E
KUWAIT
SESRA 2908.1N 04854.9E
NANPI 2905.0N 57N 04932.0E
BUSHEHR
VATOB 285126N 0511636E
[SHIRAZ]

UG670 RASHT
LALDA 3817.1N 04943.0E
(BAKU)

UG671 TANF
HAWIJA
MOSUL
UROMIYEH * Notes 2 and 3

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

**G674 MADINAH
GASSIM 2617.9N 04346.8E**

**UG674 MADINAH
GASSIM 2617.9N 04346.8E**

**G775 (ASHGHABAT)
ORPAB 3742N 05834.5E
MASHHAD
[BIRJAND] * Note 1
ZAHEDAN**

**UG775 (ASHGHABAT)
ORPAB 3742N 05834.5E
MASHHAD
[BIRJAND] * Note 1
ZAHEDAN**

**G781 (VAN)
BONAM 3802.9N 04418.0E
UROMIYEH
ROVON 3716 01N 0455322E
ZANJAN**

**UG781 (VAN)
BONAM 3802.9N 04418.0E
UROMIYEH
ROVON 3716 01N 0455322E
ZANJAN**

**G782 KING ABDULAZIZ
RAGABA
KING KHALID
MAGALA
WAFRA 2837.3N 04757.5E
KUWAIT**

**UG782 KING ABDULAZIZ
RAGABA
KING KHALID
MAGALA
WAFRA 2837.3N 04757.5E
KUWAIT**

**UG783 PURDA 210805N 0510329E
TANSU 224136N 0542828E
NIGEL230146N 0551430E
ELUDA 235107N 0552905E
ALN 241535N 0553623E
GIDIS 243600N 055600E
BUBIN 245742N 0560642E**

**~~G787E~~
G216 LAKLU 232235N 0570401E
SEEB(MCT)
DORAB 235033N 0594746E
ALPOR 240441N 0612000E
LATEM
(KC)**

**~~UG787E~~
UG216 LAKLU 232235N 05704 01E
SEEB(MCT)
DORAB 235033N 0594746E
ALPOR 240441N 0612000E
LATEM
(KC)**

**~~G787W~~
A454 (KC)
PARET
TAPDO 242400N 0612000E
VUSET 235540N 0590812E
PASOV 243841N 0565037E**

**~~UG787W~~
UA454 (KC)
PARET
TAPDO 242400N 0612000E
VUSET 235540N 0590812E
PASOV 243841N 0565037E**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

**G792 (TURKMENBASHI)
MASHAD
CHARN 3510.0N 06108.0E
HERAT
KANDAHAR
ASLUM 3101N 06637E
(RAHIM YAR KHAN)**

**UG792 (TURKMENBASHI)
MASHAD
CHARN 3510.0N 06108.0E
HERAT
KANDAHAR
ASLUM 3101N 06637E
(RAHIM YAR KHAN)**

**G795 FALKA 2926.2N 04818.3E
TASMI 300120N 0475505E
BSR 303132.4N 0472112E
RAFHA**

**UG795 FALKA 2926.2N 04818.3E
TASMI 300120N 0475505E
BSR 303132.4N 0472112E
RAFHA**

**G796 KABUL
JALALABAD
LAJAK 335600N 0703000E
HANGU 332906N 0710018E**

**UG796 KABUL
JALALABAD
LAJAK 335600N 0703000E
HANGU 332906N 0710018E**

**G799 PMA
DAFFINAH**

**UG799 PMA
DAFFINAH**

**UL124 (VAN)
BONAM
URUMIYEH (UMH)
ZANJAN(ZAJ)
SAVEH (SAV)
YAZD(YZD)
KERMAN(KER)
KEBUD 273558N 0625028E
(PANJGUR)**

**UL125 DULAV 3857N 04537.9E
TABRIZ (TBZ)
ZANJAN
PAROT 360940N 0495756E
TEHRAN
ANARAK
DARBAND
ZAHEDAN
DANIB 2909.5N 06120.1E
(PANJGUR)**

**L126 PUSTO 3321.0N 04245.0E
SOGUM 3412.2N 04354.9E
MIGMI 3345.9N 04527.4E
ILAM**

**UL126 PUSTO 3321.0N 04245.0E
SOGUM 3412.2N 04354.9E
MIGMI 3345.9N 04527.4E
ILAM**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

L200 AMMAN *Notes 2 and 3 (OJ)
PASIP 3300.0N 03855.2E
RAPLU 3323.0N 04145.5E

UL200 AMMAN *Notes 2 and 3 (OJ)
PASIP 3300.0N 03855.2E
RAPLU 3323.0N 04145.5E

L223 SIRRI
NALTA 250242N 0553955E
TARDI 243418N 0560915E
LAKLU 232235N 05704 01E

UL223 UROMIYEH
SANANDAJ
KHORAM ABAD
MESVI 312920N 0495701E
LAMERD
SIRRI * Note 7 (OI, OM)
NALTA 250242N 0553955E
TARDI 243418N 0560915E
LAKLU 232235N 05704 01E

L301 RASKI 230330N 0635200E
VAXIM 231900N 0611100E
RAGMA 232301N 0603846E
MIBSI 234139N 0575523E

UL300 LUXOR
GIBAL2437.2N03634.7E
YENBO 2408.8N 03803.9E
DAFINAH 2317.0N 04143.2E

UL301 AAU 5153N 07523 38.6E
NOBAT 210902.5N 0880000.1E
RASKI 230330N 0635200E
VAXIM 231900N 0611100E
RAGMA 232301N 0603846E
MIBSI 234139N 0575523E

L305 DOHA
ITITA 2544.2N 05418.7E

L306 TOKRA 220925N 0553350E* *
Note- (OO)
DEMKI 224941N 0562308E
LAKLU 232235N 0570401E

UL306 TOKRA 220925N 0553350E
* Note- (OO)
DEMKI 224941N 0562308E
LAKLU 232235N 0570401E

L315 CAIRO * Note 3 (HE)
HURGHADA
GIBAL 2437.2N 03634.7E

UL315 CAIRO * Note 3 (HE)
HURGHADA
GIBAL 2437.2N 03634.7E

L317 LOPAS 343003N 0433834E
ALVIS 343004N 0435518E
DASUR 343006N 0442417E
DENKI 322228N 0455122E
MUTLO 321019N 0445703E

UL317 LOPAS 343003N 0433834E
ALVIS 343004N 0435518E
DASUR 343006N 0442417E
DENKI 322228N 0455122E
MUTLO 321019N 0445703E

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

GETID 351551N 0425559E
NADID 352611N E0460145E

L321 KATAB 292501N 0290506E
KUNKI 290726N 0291949E
LUGAN 224205N 0313722E
SML 222118N 0313719E

L417 RAMPI 3516.7N 04356.3E
SOGUM 3412.2N 04354.9E
BGD
LOVEK 3222.1N 04440.0E

L513 KHALDEH
CHEKKA
LEBOR 3415.9N 03635.0E
DAMASCUS * Note 3 (OS)
BUSRA 3220.0 N 03637.0 E
HAZEM 3214.0 N 03638.0 E
QUEEN ALIA
QATRANEH (QTR)

GETID 351551N 0425559E
NADID 352611N E0460145E

UL321 KATAB 292501N 0290506E
KUNKI 290726N 0291949E
LUGAN 224205N 0313722E
SML 222118N 0313719E

UL322 MUMBAI * Note 7&1
SUGID 1933.1N 06921.0E
BOLIS 2033.5N 065 00.0E
REXOD 2112.5N 06138.5E

UL333 DASIS
TABRIZ
RASHT
ORSOK 362236N 0523020E
AMBEG 351737N 0553059E
TASLU 342632N 0574234E
SOKAM 331316N 0603754E

UL417 RAMPI 3516.7N 04356.3E
SOGUM 3412.2N 04354.9E
BGD
LOVEK 3222.1N 04440.0E

UL425 KING ABDULAZIZ
MALIK 2053.4N 03949.6E
AL BAHA
BISHA
WADI AL DAWASIR
EGREN 202236N 0464422E
ASTIN 200410N 0495320E
DIRAS 195235N 0513704E
GOBRO 193622N 0534741E
BOVOS 182230N 0575844E
ASPUX 174406N 0600006E
(TRIVANDRUM)

UL513 KHALDEH
CHEKKA
LEBOR 3415.9N 03635.0E
DAMASCUS * Note 3 (OS)
BUSRA 3220.0 N 03637.0E
HAZEM 3214.0 N 03638.0E
QUEEN ALIA
QATRANEH (QTR)

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

L519 MIADA 245112N 0545736E
*Note 7
KUMUN 254000N 0551512E

UL519 ABU DHBI (AUH) * Note 7
MIADA 245112N 0545736E

UL550 WAFRA *Note7 (OE)
ROSID 2842.4N 04652.6E
VATIM 2851.6N 04444.7E
RASMO 2857.2N 04331.3E
ORSAL2902.8N 04210.8E
NIMAR 2906.6N 03954.4E
KITOT 2902.1N 03450.8E*Note 7
NUWEIBAA
TABA
EL ARISH
PASOS
(KAROL 3252.0N 03229.0E)

L555 TOTOX 215030N 0622230E
TUMET 222307N 0595702E
TOLDA 224008N 0583624E
TULBU 230005N 0571827E

UL555 TOTOX 215030N 0622230E
TUMET 222307N 0595702E
TOLDA 224008N 0583624E
TULBU 230005N 0571827E

UL556 EGREN 202236N 0464422E
NONGA 205048N 0492014E
PURDA 210805N 0510329E
Note:- 7 (OO, OB)
IMDAM 202416N 0550801E
HAIMA 195813N 0561651E
KUTVI 184306N 0582642E

UL560 ARDABIL 3819.9N 04824.9E
* Note 3&4 (OI)
SEVAN 4032.0N 04456.9E

UL566 ~~PAKER 115500N 0463500E~~
~~KAPET 163322N 0530614E~~
ASMAK 162327N 0524634E
UKNEN 160542N 0522012E
PURUG 151204N 0510142E
KUSOL 144009N 0501534E
NOTBO 142609N 0495530E
EMABI 141627N 0494139E
SOKEM 134235N 0485329E
DATEG 123549N 0471627E

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

**UL572 KAMISHLY (KML)
LESRI 3704.3N 04113.8E**

**UL573 DAFINAH 231658N 0414310E
WEHJ 261045N 0362917E**

**UL601 (BAGLUM –BAG 04004.2 03248.6)
* Note 7
ADANA 3656.4N 03512.6E
TUNLA 3553.0N 0360200E)
KARIATAIN 3412.8N 03715.9E**

**UL602 BAHRAIN
ALVON 270009N 0500711E*Note 7
SELEG 280130N 0492212E
RAPSI 282326N 0490551E
DARVA 284814N 0484734E
ALVIX 2919.3N04824.2E
FALKA 292611N 0481819E
TASMI 300120N 0475505E
BASRAH
LOVEK322206N 0444000E
DELMI331911N 0431731E
ELEXI 344237N 0411054E
DRZ 351724N 0401124E
KUKSI 364508N 0374910E
GAZ 365701N 0372824E**

**UL607 SITIA (SIT)* Note 7
PAXIS 3357.1N02720.0E
OTIKO 3134.4N 02936.6E
ALEXANDRIA (AXD)**

**UL613 EL DABA (DBA)*Note 7
SOKAL 3236.0N 02737.1E
TANSA 3400.0N 02649.0E**

**UL617 AXD
ASNIR 323848N 0282142E
TANSA 340000N 0264900E**

**UL631 TOTOX 215030N0622230E
SEVLA 233321N 0591122E**

**UL750 ZHOB 3121.3N 06927.6E
ROSIE 3140.0N 06900.0E
MAXIM 3246.2N 06727.4E
HORST 3327.6N 06627.5E**

**L617 AXD
ASNIR 323848N 0282142E
TANSA 340000N 0264900E**

**L631 TOTOX 215030N0622230E
SEVLA 233321N 0591122E**

**L750 ZHOB 3121.3N 06927.6E
ROSIE 3140.0N 06900.0E
MAXIM 3246.2N 06727.4E
HORST 3327.6N 06627.5E**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

VELDT 3430.0N 06454.1E
RANAH 3535.0N 06312.0E
(AFGAN-3824.0N 05817.0E)

VELDT 3430.0N 06454.1E
RANAH 3535.0N 06312.0E
(AFGAN-3824.0N 05817.0E)

L764 SEEB (MCT)
ALMOG 233524N 0574940E
IVETO 233520N 0570704E
PAXIM 240245N 0561631E

UL764 SEEB (MCT)
ALMOG 233524N 0574940E
IVETO 233520N 0570704E
PAXIM 240245N 0561631E

UL768 PIMAL 2626.5N 05122.1E
ALVON2700.2N 05007.2E
COPPI 2750.6N 04744.0E
HFR
VATIM 2851.6N 04444.7E
RAFHA (RAF)
ARAR (AAR)
OVANO3148.0N 03909.9E
OTILA 3201.5N 03901.9E

UL883 REXOD 211230N 0613830E
UMILA 211555N 0584738E
SITOL 211604N 0552514E
PURDA 210805N 0510329E
ALRIK 220631N 0482535E
PMA N243251N 0394219E

M203 PUSTO 3321.0N 04245.0E
LOVEK 3222.1N 04440.0E
DISAR 3131.3N 04613.4E

UM203 PUSTO 3321.0N 04245.0E
LOVEK 3222.1N 04440.0E
DISAR 3131.3N 04613.4E

M300 LOTAV 2037N 0605700E
EMURU 221535N 0584950E

UM300 (CALICUT)
LOTAV 2037N 0605700E
EMURU 221535N 0584950E

M301 PURAD 145500N 0415354E
SANA'A SAA
~~KAPET 163322N 0530614E~~
ASMAK162327N 0524634E

UM301 PURAD 145500N 0415354E
SANA'A SAA
~~KAPET 163322N 0530614E~~
ASMAK162327N 0524634E

UM309 KIND KHALED
NASIR 221444N 0400315E

M320 KING FAHD
JUBAIL
KUWAIT

UM320 KING FAHD
JUBAIL
KUWAIT

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

		UM321	RAGHBA HAIL HALAIFA 262602N 0391609E KING KHALED
M508	KING KHALED OVEKU 250955N 0445701E MADINAH	UM508	KING KHALED OVEKU 250955N 0445701E MADINAH
M551	AVAVO 1646.3N 05526.1E KIVEL 165306N 0553633E DAXAM 171612N 0544715E	UM551	DONSA1435.3N06344.0E ANGAL1614.1N 06000.1E AVAVO 1646.3N 05526.1E OTOTO 164004N 0570435E KIVEL 165306N 0553633E DAXAM 171612N 0544715E
M552	(RAHIM YAR KHAN) BIRJAND (BJD) DEHNAMAK(DHN) TEHERAN (TRN) ZANJAN TABRIZ (TBZ)	UM552	(RAHIM YAR KHAN) BIRJAND (BJD) DEHNAMAK(DHN) TEHERAN (TRN) ZANJAN TABRIZ (TBZ)
M561	KISH * Note 3&4 (OI) MOBET 2645.3N 05609.8E EGSAL 2716.8N06249.0E PANJGUR	UM561	RATUN 2646.2N05108.0E *See Note 7 MIDSI 2641.7N05154.7E KISH * Note 3&4 (OI) GHESHM MOBET 2645.3N 05609.8E EGSAL 2716.8N06249.0E PANJGUR
		UM573	TEHERAN (TRN) TABRIZ 3808.3N 04613.9E
		UM574	(MALE) (POPET) 0713.7N06813.6E NABIL 1222.0E0600.0E RIGAM 143932N 0530414E ODAKA 1440.6N05234.0E SYN 1557.7N04847.2E HELAL 1716.0N04422.0E NOBSU 171554N 0431318E ABHA 1814.4N04239.5E JEDDAH

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

M628 EGVAN 230127N 0561907E
TULBU 230005N 0571827E
GEVED 230105N 0575111E
GIDAN 230104N 0582232E
KAXEM 225103N 0595243E
PARAR 222630N 0630700E

UM628 DAFINAH 231700N 0414312E
KIPOM 225316N 0501518E
MIGMA 225035N 0512749E
KITAP 224928N 0522923E
ALPEK 224648N 0535942E
EGVAN 230127N 0561907E
TULBU 230005N 0571827E
GEVED 230105N 0575111E
GIDAN 230104N 0582232E
KAXEM 225103N 0595243E
PARAR 222630N 0630700E

M634 ANGAL 161406N 0600006E
~~UBTEN 120814N 0495611E~~

UM634 ANGAL 161406N 0600006E
~~UBTEN 120814N 0495611E~~

M651 **VEDET 120134N 0512410E**
ATBOT 171418N 0464706E

UM651 **VEDET 120134N 0512410E**
ATBOT 171418N 0464706E

ADEN
(HARGEISA)

ADEN
(HARGEISA)

M762 REXOD 211230N 0613830E
SUR 223159N 0592829E
ALMOG 233524N 0574940E
TAPRA 242607N 0563803E
VAXAS 244308N 0561807E
* Note 7 (OM, OO)
BUBIN 245742N 0560642E

UM877 VUSET 235540N 0590812E
KUSRA 232426N 0582611E

M881 (BANNU -BN)
LAJAK 3356.0N 07030.0E
JALAL 3430.0N 07045.0E
MATAL 3600.0N 07100.0E
ANWAR 3652.0N 07034.0E
(GARRI- 3825.0N 07034.0E)

UM881 (BANNU -BN)
LAJAK 3356.0N 07030.0E
JALAL 3430.0N 07045.0E
MATAL 3600.0N 07100.0E
ANWAR 3652.0N 07034.0E
(GARRI- 3825.0N 07034.0E)

N303 (HARGEISA)
PARIM 1231.7N 04327.2E

UM999 (LUXOR)
DEDLI 2242 32N 03737 19E
OSAMA 2215 54N 03817 34E
KING ABDULAZIZ (JDW)

UN303 (HARGEISA)
PARIM 1231.7N 04327.2E

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

**RIBOK 1547N 04152.5E
LABNI 1656.3N 04109.4E**

**RIBOK1547N 04152.5E
LABNI 1656.3N 04109.4E**

**UN315 ASPUX 174406N 0600006E
KUTVI 184306N 0582642E
Note:- 7 (OO/OB)
SITOL 211604N 0552514E
LOTOS 220000N 0503912E
RAPMA 232229N 0482010E
RESAL 240649N 0470427E
KING KHALED**

**UN316 HALAIFA 262602N 0391609E
PASAM 273045N 0345542E**

**UN318 TONTU 314804N 0381110E
RAGOM 313227N 0381656E
NEVOL 3024.7N 03938.6E
VELAL2946.0N 04038.4E
TAMRO 2838.6N 04240.8E
MOGON 2738.8N 04445.9E
TAGSO 2727.7N 04545.2E
KUSAR 2647.7N 04902.3E
KFA**

**UN319 ZAHEDAN
TABAS (TBS)
DASHT-E-NAZ (DNZ)
ULDUS- 3800.0N 05101.0E**

**N324 NALTI 221858N 0500751E
OBNAM 211843N 0503532E
PURDA 210805N 0510329E
GOBRO 193622N 0534741E
MRL 180832N 0551040E**

**UN324 NALTI 221858N 0500751E
OBNAM 211843N 0503532E
PURDA 210805N 0510329E
GOBRO 193622N 0534741E
MRL 180832N 0551040E**

**N519 KHI -245436N 0671036E
SAPNA 233000N 0675000E
PRN 213824N 0693948E
TAXUN 211906N 0701520E
EXOLU 201248N 0713412E
(BBB- 190506N 0725230E**

**UN555 BELGAUM
BISET 1823.4N 06918.1E
KATBI 1931.6N 06500.0E
LOTAV 2037.0N 06057.0E**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

N563 REXOD 211230N 0613830E*Note 7 (OO.OM)
EMURU 221357N 0585338E
TULBU 230005N 0571827E
MEKNA 223309N 0560815E
SODEX 234954N 0553202E
NOBTO 235525N 0551840E
AUH 242612N 0543900E

UN563 (BANGALORE)
REXOD 211230N 0613830E*Note 7 (OO.OM)
EMURU 221357N 0585338E
TULBU 230005N 0571827E
MEKNA 223309N 0560815E
SODEX 234954N 0553202E
NOBTO 235525N 0551840E
AUH 242612N 0543900E

UN569 JDW 214045N 0390958E
NASIR 221642N 0400318E
LOTOS
Note:- 7 (OB/OO)
TOKRA 220925N 0553350E
UMILA 211555N 0584738E
LOTAV 203700N 0605700E

N571 PARAR 2226.5 N 06307E* Note 7 (OO)
RAGMA 230600N 0610539E
* Note 7 (OO, OM)
VUSET 235540N 0590812E
MENSA 245750N 0563249E
ATBOR 251007N 0551947E
RANBI 251908N 0544500E
BALUS 254554N 0530424E

UN571 (SUGID- 1933.1 N 06921.0E)
PARAR 2226.5 N 06307E* Note 7 (OO OM)
RAGMA 230600N 0610539E
* Note 7 (OO)
VUSET 235540N 0590812E
MENSA 245750N 0563249E
ATBOR 251007N 0551947E
RANBI 251908N 0544500E
BALUS 254554N 0530424E

N629 TARDI 243418N 0560915E *Note 7 (OO)
NOSMI 241757N 0563002E
RAGUD 234701N 0571644E
~~SEEB (MCT)~~
GEPOT 231446N 0580053E
GIDAN 230104N 0582232E
TOTOX 215030N 0622230E

UN629 TARDI 243418N 0560915E*Note 7 (OO)
NOSMI 241757N 0563002E
RAGUD 234701N 0571644E
~~SEEB (MCT)~~
GEPOT 231446N 0580053E
GIDAN 230104N 0582232E
TOTOX 215030N 0622230E

N638 KING KHALED
PMA 243251N0394219E

UN638 KING KHALED
PMA 243251N0394219E

UN644 (DERA ISMAIL KHAN)
GHAZNI (GN)
LEMOD 3610.0N 06417.5E
(MEKOL -3730.0N 06200.0E)

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

			(TABIP-3900.0N 05820.0E
N764	NOBSU 171554N 0431318E RIN 144015N 0492329E SOCOTRA 123749N 0535429E SUHIL 12000N 055000E	UN764	NOBSU 171554N 0431318E RIN 144015N 0492329E SOCOTRA 123749N 0535429E SUHIL 12000N 055000E
N767	PARAR 222630N 0630700E SEVLA 233321N 0591122E SEEB (MCT) * Note 7	UN767	PARAR 222630N 0630700E SEVLA 233321N 0591122E SEEB (MCT) * Note 7
		UN881	RASKI 230330N 0635200E SETSI 230412N 0614410E MUSRU 230256N 0592223E *Note 7 GIDAN 230104N 0582232E
		UP146	RASHT AGINA 3919.4N 04405.2E (AGRI)
P302	HALAIFA*Note 3(OE,OJ) GURIAT HAZEM	UP302	HALAIFA *Note 3(OE,OJ) GURIAT HAZEM
		UP307	SHJ VOR Note 7 (OM,OO) PARAR 222630N 0630700E
P312	RIYAN PAKER 1155.0N0463500E (HARGEISA)	UP312	RIYAN PAKER 1155.0N0463500E (HARGEISA)
P316	SALALLAH * Note 7 (OO) DAXAM GAGLA 180505N 0552410E RADAX 220809N 0580230E SEEB (MCT)	UP316	SALALLAH * Note 7 (OO) DAXAM 171612N 0544715E GAGLA 180505N 0552410E GIVNO 195011N 0563059E MOBAB 201032N 0564415E GISKA 213503N 0574014E RADAX 220809N 0580230E SEEB (MCT)
		UP318N UP518	NOBAT 2109 02N 0680000E KABIM 2330 00N 06628 00E PAXUR-2400N 0660000E PARET 2527.2N 06451.5E PANJGUR * Note 7 (OI)

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

P319 PANJGUR * Note 7 (OI)
DOSTI 255800N 0650300E
KHI -255436N 0671036E
SAPNA 2330N 06750E
PAXUR 2400N 06600E
BILAT 205824N 06800E

UP319 PANJGUR * Note 7 (OI)
DOSTI 255800N 0650300E
KHI -255436N 0671036E
SAPNA 2330N 06750E
PAXUR 2400N 06600E
BILAT 205824N 06800E

UP323 ANODA 0958.1N 07224.0E
GOLEM 1157.7N 0672202E
GIDAS 142004N0600000E
~~**KADER 151300N 05500E**~~
NIDOD 151115N 0552354E
PATAP 152744N0532929E
AL-GHAIDAH
THAMUD 1717.0N 04955.0E
BISHA 1958.7N 04237.5E
JEDDAH

P500 (DERA ISMAIL KHAN - DI)
(BANNU -BN)
(HANGU- 3329.1N 07100.4E)
(PESHAWAR-PS)
(CHITRAL -3553.2N 07148.0E)
(GERRY-3612.0N 07135.0E)
PADDY- 3628.0N 07138.0E
FIRUZ 3640.0N 07138.0E

UP500 (DERA ISMAIL KHAN - DI)
(BANNU -BN)
(HANGU- 3329.1N 07100.4E)
(PESHAWAR-PS)
(CHITRAL -3553.2N 07148.0E)
(GERRY-3612.0N 07135.0E)
PADDY- 3628.0N 07138.0E
FIRUZ- 3640.0N 07138.0E

P513 BUBAS 245938N 0570003E
GERAR 240600N 0573616E
MIBSI 234139N 0575523E
SEEB (MCT) * Note 7

UP517 WAFRA
GOVAL
KMC

UP555 NUWEIBAA*See Note 3
RASDA 3306.0N 03057.0E
(KAVOS)

P557 NUBAR 220000N
0313806E*SeeNote 6&7
MISUK 290507N 0290621E
KATAB 292501N0290506E

UP557 NUBAR 220000N
0313806E*SeeNote 6&7
MISUK 290507N 0290621E
KATAB 292501N0290506E

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

P559 (LARNACA)
KUKLA 3414.6N 3444.8E
KHALDEH (KAD)
DAKWE 3338.9N 03555.0E
 * Note 4 (OS)
DAMASCUS
TONTU 3148.1N 03811.2E
 * Note 3(OS,OJ)

UP559 (LARNACA)
KUKLA 3414.6N 3444.8E
KHALDEH (KAD)
DAKWE 3338.9N 03555.0E
DAMASCUS
TONTU 3148.1N 03811.2E
 * Note 3 (OS,OJ)
TURAI (TRF)
KAVID 3035.9N 04011.8E
TOKLU 2942.1N 04202.4E
RASMO 2857.2N 04331.3E
KMC
MUSKO 2726.7N 04737.1E
KEDAT 2721.8N 04759.0E
JUBAIL (JBL)
ALVON 2700.2N 05007.2E
RATUN 2646.2N 05108.0E

P570 KITAL 2003N 06018E
MIBSI 234139N 0575523E

UP567 BIRJAND
ODKAT 3540.6N 05457.2E
DASHT-E-NAZ -3638.7N 05311.4E
(ULDUS -3800.0N 05101.0E)

P571 LABNI 16 620N 0410921E
NISMI 162415N 0421838E
~~**SANA'A (SAA)**~~
RIN
VEDET 120134N 0512410E

UP570 TRIVENDRUM
VISET1831 12N 06229 64E
KITAL 2003N 06018E
MIBSI 234139N 0575523E

UP571 LABNI 165620N 0410921E
NISMI 162415N 0421838E
~~**SANA'A (SAA)**~~
RIN
VEDET 120134N 0512410E

UP574 (BELGAUM)
(BISET- 1823.4N 06918.1E)
TOTOX 215030N 0622230E
 * Note 7 (OO)
KUSRA 231726N 0585102E
MIBSI 234138N 0575525E
LUDAL 235023N 0574305E
SOLUD 243223N 0564421E
GISMO 244743N 0562236E
BUBIN 245742N 0560642E
KUMUN 254000N 0551512E
 * Note 7 (KUMUN-PAPAR)

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

			PAPAR 264000N 0542700E SHIRAZ ESFAHAN TEHRAN ULDUS
		UP634	LALDO 251806N 0563600E ATBOR 251007N 0551947E
		UP891	MAGALA EGNOV EMILU ASVIR KUWAIT
P899	PARAR 222630N 0630700E *Note 7 (OO,OM) MIBSI 234139N 0575523E PAXIM 240245N 05617631E ITRAX 241248N 0554749E AL AIN (ALN) ABU DHABI	UP899	PARAR 222630N 0630700E*Note 7 (OO,OM) MIBSI 234139N 0575523E PAXIM 240245N 05617631E ITRAX 241248N 0554749E AL AIN (ALN) ABU DHABI
		UP975	(ELAZIG)*Note7 (DYB) 384225N 0391328E LESRI 370420N 0411348E KANOK 3634.0N 04141.0E SOGUM 341212N 0435454E ETBOM 332143N 0444813E NOLDO 324930N 0452130E PUSMO 304444N 0473547E SIDAD 295231N 0482944E LONOS 283414N 0492344E TESSO 282852N 0492723E MIXAR 270800N 0503300E RATUN 264613N 0510759E
R205	ANARAK BIRJAND	UR205	ANARAK BIRJAND
R219	SHARJAH * Note 7 (OB, OM) RATUN 2646.2N 05108.0E KING FAHD * Note 7 (OB) BOROP 2653 17 N 04852 03E	UR219	OTILA 3201.5N 03901.9E*Note 7 MODAD SOKAN RAFIF

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

KEDAT 2721 49N 04759 01E

SULAF
FIRAS

R401 AMPEX 0810.0N 05500.0E
 SUHIL 1200.0N 05500.0E
~~KADER 1506.0N 05500.0^E~~
NIDOD 151115N 0552354E
KIVEL 165306N 0553633E
~~AVAVO 1647.1N 05526.1E~~
 HAIMA
 DEMKI 224941N 0562308E
 MUSAP241754N 0555245E
 GIDIS 243600N 0555600E
 RAS AL
 DARAX
GHESHM

R402 LAKLU 232235N 0570401E
 HAIMA (HAI)

R456 KITAL200300N 0601800E
 (MALE)

R462 (JIWANI)
 DENDA 2442.5N 06054.8E
 VUSET 235540N 0590812E
 MIBSI 234139N 0575523)
 *Note 7 (OO)

R650 LUXOR
 HURGHADA
 SHARM EL SHEIKH
 NUWEIBAA
 NALSO 2932.0N 03453.0E

R651 TANF
 SHATRA

R652 TURAIF
 *Note 7(OE)
 GURIAT
 QATRANEH
 AQABA
 METSA 2930.0N 03500.0E

R653 JERUSALEM * Note 4(OJ, OS)
 RAMTHA

UR401 AMPEX 08 10.0N 055 00.0E
 SUHIL 1200.0N 05500.0E
~~KADER 1506.0N 05500.0^E~~
NIDOD 151115N 0552354E
KIVEL 165306N 0553633E
~~AVAVO 1647.1N 05526.1E~~
 HAIMA
 DEMKI 224941N 0562308E
 MUSAP 241754N 0555245E
 GIDIS 243600N 0555600E
 RAS AL KHAIMAH
 DARAX
GHESHM

UR402 LAKLU 232235N 0570401E
 HAIMA (HAI)

UR456 KITAL200300N 0601800E
 (MALE)

UR462 (JIWANI)
 DENDA 2442.5N 06054.8E
 VUSET 235540N 0590812E
 MIBSI 234139N 0575523E
 *Note 7 (OO)

UR650 LUXOR
 HURGHADA
 SHARM EL SHEIKH
 NUWEIBAA
 NALSO 2932.0N 03453.0E

UR651 TANF
 SHATRA

UR652 TURAIF
 *Note 7(OE)
 GURIAT
 QATRANEH
 AQABA
 METSA 2930.0N 03500.0E

UR653 JERUSALEM * Note 4(OJ, OS)
 RAMTHA

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

DAMASCUS

R654	ZANJAN SAVEH ESFAHAN YAZD KERMAN NABOD 2816.1N 05825.3E CHAH BAHAR (CBH) EGTAL 243458N 0603724E VAXIM 231900N 0611100E
R655	(LARNACA) CHEKKA KARIATAIN
R658	SEEB MELMI 2647.0N 05723.0E BANDAR ABBAS
R659	SHIRAZ DOHA MARM 241400N 0511330E MIGMA 225035N 0512749E PURDA 210805N 0510329E ASTIN 200410N 0495320E TULIS 173033N 0462616E ALHAZM 161230N 0444742E SANA'A TATNA 171429N 0461418E RAGNI 163454N 0454815E LOPAD 161651N 0453738E ITOLI 152825N 0450927E OBNAM 144541N 0444448E GEVEL 141229N 0442547E NOPVO 135436N 0441536E TAZ 134149.53N 0440818.98E PARIM 123142N 0432712EE
R660	(ERZERUM) DASIS 38 54.5N 044 12.5E TABRIZ RASHT TEHRAN

DAMASCUS

UR654	MEGRI ZANJAN SAVEH ESFAHAN YAZD KERMAN NABOD 2816.1N 05825.3E CHAH BAHAR (CBH) EGTAL 243458N 0603724E VAXIM 231900N 0611100E
UR655	(LARNACA) CHEKKA KARIATAIN
UR658	SEEB MELMI 2647.0N 05723.0E BANDAR ABBAS
UR659	SHIRAZ DOHA MARM 241400N 0511330E MIGMA 225035N 0512749E PURDA 210805N 0510329E ASTIN 200410N 0495320E TULIS 173033N 0462616E ALHAZM 161230N 0444742E SANA'A TATNA 171429N 0461418E RAGNI 163454N 0454815E LOPAD 161651N 0453738E ITOLI 152825N 0450927E OBNAM 144541N 0444448E GEVEL 141229N 0442547E NOPVO 135436N 0441536E TAZ 134149.53N 0440818.98E PARIM 123142N 0432712EE
UR660	RASHT TEHRAN

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

**R661 DULAV 3857.0N 04537.9E
TABRIZ
ZANJAN
RUDESHUR
VARAMIN
DEHNAMAK**

**UR661 DULAV 3857.0N 04537.9E
TABRIZ
ZANJAN
RUDESHUR
VARAMIN
DEHNAMAK**

**UR674 SABLE 185158N 0520339E
LOTEL 180926N 0514103E
PASUL 180341N 0513803E
GOGRI 170752N 0510857E
OBTAS 164633N 0505756E
RARBA 161021N 0503920E
UKORA 152407N 0501547E
NAKAD 150056N 0500402E
DANAN 144010N 0495334E
XABIL 142924N 0494809E
EMABI 141627N 0494139E
PAXED 135027N 0492759E
DEMGO 120258N 0483040E**

**R775 LUXOR (LXR) 254458N 0324607E
DEDLI 2242 32N 03737 19E
KING ABDULAZIZ
DANAK 1608.0N 04129.0E
(ASSAB)**

**UR775 KING ABDULAZIZ
DANAK 1608.0N 04129.0E
(ASSAB)**

**R777 DANAK 1608.0N 04129.0E
SANA'A
TAIZ
ARABO 1238.8N 04404.0E
TORBA 1210.6N 04402.1E**

**UR777 DANAK 1608.0N 04129.0E
SANA'A
TAIZ
ARABO 1238.8N 04404.0E
TORBA 1210.6N 04402.1E**

**R784 SHARJAH
ORSAR2604.5N 05357.5E
DURSI 2712.3N 05201.7E
IMDAT 2740.0N 05113.0E
ALNIN 2840.9N 05001.6E
NANPI 2905.0N 04932.0E
SIDAD 2952.5N 04829.7E
PUSMO 304444N 0473547E
ALVET 313500N 0471500E
ITSOP 330422N 0454208E
GONSI 332622N 0451837E
SIGNI 340006N 0444200E
RAMPI 351642N 0435618E
KATOT 360000N 0432700E
KABAN 3715.0N 04239.0E**

**UR784 SHARJAH
ORSAR 2604.5N 05357.5E
DURSI 2712.3N 05201.7 E
IMDAT 2740.0N 05113.0E
ALNIN 2840.9N 05001.6E
NANPI 2905.0N 04932.0E
SIDAD 2952.5N 04829.7E
PUSMO 304444N 0473547E
ALVET 313500N 0471500E
ITSOP 330422N 0454208E
GONSI 332622N 0451837E
SIGNI 340006N 0444200E
RAMPI 351642N 0435618E
KATOT 360000N 0432700E
KABAN 3715.0N 04239.0E**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

(SIIRT)

**R785 TURAIF
ZELAF 3257.0N 03800.0E
KARIATAIN
BANIAS
NIKAS 3511.6N 03543.0E**

**R794 ULDUZ 3810.0N 05020.0E
NOSHAHR
DEHNAMAK
TABAS
BIRJAND * Note 5 (OI)**

**R799 ~~SILPA 184953N0510158E~~
~~PATAP 152744N 0532929.5E~~
IMPOS 183136N 0511848 E
PASUL 180341N 0513803^E
TONRO 165850N 0522235^E
ASMAK 162327N 0524634^E
ENADO 153333N 0532015E**

(SIIRT)

**UR785 TURAIF
ZELAF 3257.0N 03800.0E
KARIATAIN
BANIAS
NIKAS 3511.6N 03543.0E**

**UR794 ULDUZ 3810.0N 05020.0E
NOSHAHR
DEHNAMAK
TABAS
BIRJAND * Note 5 (OI)**

**UR799 SILPA 184953N0510158E
PATAP 152744N 0532929.5E
IMPOS 183136N 0511848 E
PASUL 180341N 0513803^E
TONRO 165850N 0522235^E
ASMAK 162327N 0524634^E
ENADO 153333N 0532015E**

ATM/SAR/AIS SG/8
 Appendix 3B to the Report on Agenda Item 3

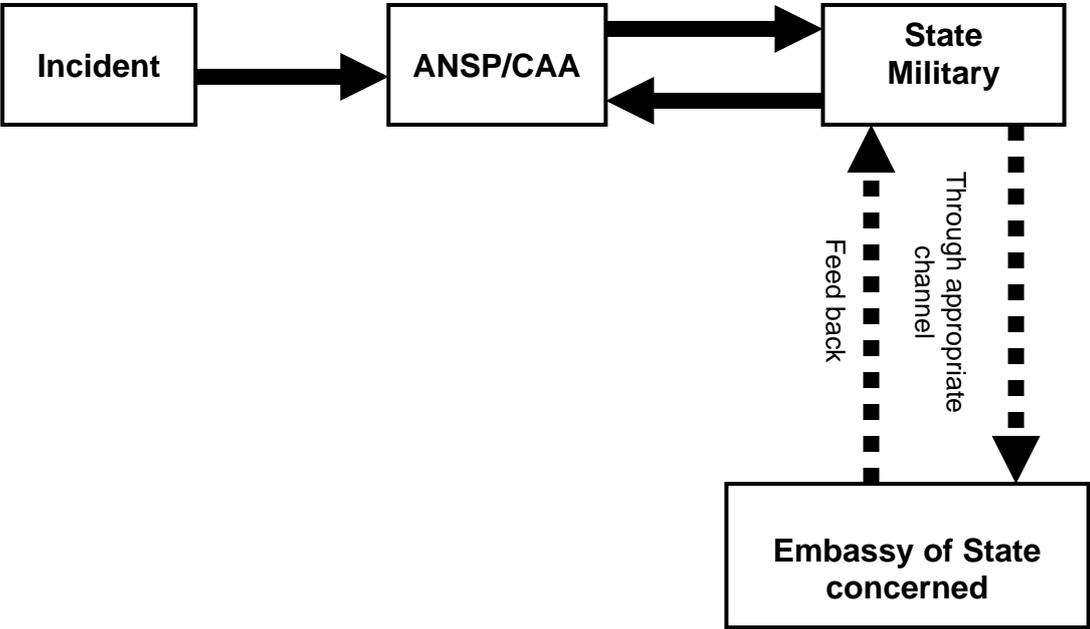
FUTURE ATS ROUTE REQUIREMENTS

Ident	Start Point	End Point	Description	FIRs concerned	Flight Level band	Priority	Requested by (date)	Remarks
A412	JERUSALEM	TANF	JERUSALEM AMMAN ZELAF 3257.0N 03800.0E TANF	Amman Damascus Tel-Aviv			IATA	
B419	DOHA	KUWAIT	[DOHA] [KING FAHD] * Note3 (OB, OT) ALVON 2700.2N 05007.2E SELEG 2801.5N 04922.2E KUWAIT	Bahrain Jeddah Kuwait			IATA	Military restrictions. Saudi Arabia is ready to implement.
B538	GAZIANTEP	DAMASCUS	(GAZIANTEP) ALEPPO KARIATAIN DAMASCUS	Damascus			IATA	Segment GAZIANTEP-ALEPPO implemented (B544)
B545	BALMA	AMMAN	(MUT) BALMA 3428.9N 035 3.0E KHALDEH AMMAN	Amman Beirut Ankara			IATA	
G660	KING ABDULAZIZ	ABU DHABI	KING ABDULAZIZ ABU DHABI * Note3 (OE, OM)				IATA	Military restrictions
G662	DAMASCUS	KING KHALID	[DAMASCUS] [GURIAT] AL SHIGAR HAIL GASSIM	Amman Damascus			IATA	

Ident	Start Point	End Point	Description	FIRs concerned	Flight Level band	Priority	Requested by (date)	Remarks
			KING KHALID					
G664	APLON	AMMAN	APLON 3352.0N 03204.0E BEN GURION AMMAN	Amman Tel-Aviv			IATA	
R653	JERUSALEM	DAMASCUS	JERUSALEM RAMTHA DAMASCUS	Damascus Tel-Aviv			IATA	
XXXX	ARI (Agri)	NT (Nakhchivan)	ARI (Agri) AAAAA (TUR/IRN BDRY) BBBBB (IRN/AZE BDRY) NT (Nakhchivan)	Ankara (TUR) Tehran Yerevan (AZE)			Turkey (2002)	

INCIDENTS DATA REPORTING MECHANISM

Taking into consideration the deficiencies noted in the reporting process of incidents involving State aircraft, as an interim measure, the following flow chart is a suggested process which may facilitate feedback on State aircraft incidents:



PROCEDURES FOR THE HANDLING OF UNCOORDINATED FLIGHTS CROSSING THE RED SEA AREA

Uncoordinated flights operating within the Red Sea area shall implement the following procedures as from 27 November 2003:

1. Committing all uncoordinated flights over the Red Sea to squawk the Radar Code A2000. *The representative of IATA was assigned the task of notifying concerned airlines operating in this region of the importance of such issue. Representatives of the concerned States were also informed of the necessity of reporting to IATA any aircraft that do not use the Radar Code A2000.*
2. Uncoordinated flights should maintain a single flight level (FL) while crossing the Red Sea from south to north, namely FL300.
3. Uncoordinated flights should maintain a single flight level (FL) while crossing the Red Sea from north to south, namely FL290, unless otherwise is coordinated.
4. Uncoordinated flights crossing the Red Sea should provide their flight details on the working frequencies of the concerned Air Traffic Control Centres (ACCs), namely Sana'a, Jeddah, Khartoum, and Cairo and notify these Centres of the following data: call sign, direction, altitude, time of crossing the reporting points along the boundaries of the FIR.
5. Uncoordinated flights crossing the Red Sea should transmit their flight details 10 minutes prior to crossing the boundaries of the concerned FIR and the compulsory reporting points in addition to listen on to the appropriate frequencies in order to identify other civil aircraft that may conflict with them and represent risk of collision.
6. Civil Aviation Authorities of the concerned States should instruct their ACCs to develop procedures for the communication of appropriate information regarding uncoordinated flights; survey and register irregularities by these uncoordinated flights; and find a mechanism in coordination with Regional Offices and other international bodies to commit these flights to conformity with the reached recommendations.
7. Increase the awareness of Air Traffic Controllers at ACCs in the concerned States of this situation and of the potential risks; in addition to benefit from radar facilities for the monitoring of non-conforming flights.
8. All flights flying in the center of the Red Sea and maintaining RVSM Flight levels (between FL290-FL410) should be RVSM approved in accordance with the MID Region requirements.
9. Unless otherwise coordinated, all the abovementioned flights, in case of non-compliance with the Region's requirements for flying in an RVSM area, should be allocated two Flight levels, namely FL250 and FL260.
10. All navigational information regarding aircraft on direct routes in the center of the Red Sea and considered unidentified by the Air Traffic Control Centres should be sent via either AFTN or any other means.

11. *IATA will assist in requesting civil flights operating within Sana'a FIR to operate on established ATS routes.
12. The agreement above should be added in the form of Letters of Agreement (LOAs) between the ACCs of the concerned Arab States.

Note:-

- ** Included in the agreement at the request on Yemen*

ATM/SAR/AIS SG/8
Report on Agenda Item 4

REPORT ON AGENDA ITEM 4: RVSM OPERATIONS AND MONITORING ACTIVITIES IN THE MID REGION

4.1 Under this agenda item, the meeting recalled that MIDANPIRG/9 when discussing the issue of RVSM operations and monitoring activities in the MID Region, recalled that the overall responsibility for deciding that RVSM should be implemented and continued rests with MIDANPIRG. The meeting noted with concern that, unless a concrete action plan is developed and the MID RMA is established in order to take over RVSM related duties and responsibilities as specified in the RMA Handbook and the RVSM Manual (Doc 9574-AN/934), the withdrawal of RVSM operations from the MID Region would be considered by ICAO.

4.2 Accordingly, MIDANPIRG/9 under Conclusion 9/13 agreed that the MID Regional Monitoring Agency (MID RMA) be established for carrying out RVSM and eventually, RNP and RNAV related duties and responsibilities in the MID Region, as soon as possible, and developed an Action Plan for the set up of the MID RMA.

4.3 The meeting noted that the MID RMA/1 meeting, Cairo, 14-15 June 2005 and the MID RMA Board/1 meeting, Cairo, 05-06 September 2005 further developed and updated the action plan relative to the establishment of the MID RMA. All issues pertaining to the modalities, organizational structure and funding mechanism of the MID RMA have been discussed which lead to the establishment of the MID RMA in Bahrain, effective 24 November 2005 with the help of EUROCONTROL and based on the offer made by Bahrain to establish and host the MID RMA, providing the required resources and ensuring the administrative management (provision and management of Staff). Bahrain also offered to pay for the set up of the MID RMA without waiting for MID States' contributions, provided that Bahrain recovers the cost through the agreed funding mechanism.

4.4 With a view to resolve the legal issues related to the membership, funding, duties and responsibilities of the MID RMA and after a long process of coordination between the MID Regional Office, ICAO HQ and States, a Memorandum of Agreement (MOA) has been signed by ten (10) participating States.

4.5 The MID RMA Board/2 meeting, Bahrain, 27-28 February 2006 further reviewed the progress of the MID RMA Project and agreed to the main points of negotiation for a Custodian Agreement between ICAO, the MID RMA Board and Bahrain. The Custodian Agreement, which describes exactly the support functions of ICAO in the MID RMA (invoicing the MID RMA States according to the apportionment provided by the MID RMA Board, collection of States' contributions, recording States' contributions in the MID RMA fund and tracking accrued interest, reporting on funds received and balance of funds to the MID RMA Board via a quarterly statement, reimbursing Bahrain on the basis of a certified request for payment by the MID RMA Board, etc), has been signed by the three concerned parties (the ICAO Secretary General, The Under Secretary Civil Aviation Affairs of Bahrain and the MID RMA Board Chairman).

4.6 Based on the outcome of the MID RMA Board/2 and the RVSM TF/12 meetings, the Sub Group noted with appreciation that the MID RMA Project Action Plan is progressing well. However, concern was raised about the progress made for the development of the RVSM post-implementation safety analysis. In this regard, the issue of provision of the required data to the MID RMA was raised with concern. Some States mentioned that the main cause for the delay in the provision of traffic data is due to the manual processing of this data.

ATM/SAR/AIS SG/8
Report on Agenda Item 4

4.7 The meeting noted that RVSM post-implementation safety analysis encompasses both horizontal and vertical analysis. For the horizontal analysis, radar data within the Bahrain FIR for the northern part of Bahrain (BAH) was forwarded to EUROCONTROL for evaluation. Additional radar data analysis activities have been planned. For the vertical assessment, it was agreed that the traffic data for the month of April 2006 will be used.

4.8 The meeting recalled that the MMS/3 meeting held in Jeddah, 4-6 September 2006, was also concerned about the unsatisfactory provision of data by the MID RMA Member States and reiterated the urgent need to provide the required data to the MID RMA with a view to expedite the development of the RVSM post-implementation safety analysis.

4.9 The meeting emphasized that unless States make all effort to provide the required data, the RVSM post-implementation safety analysis could not be developed and the MID RMA could not carry out its functions as specified in its Terms of Reference (TOR), duties and responsibilities. In order to achieve the objectives and enable the MID RMA to discharge its responsibilities, the meeting urged States, who have not yet done so, to provide the required data to the MID RMA, as soon as possible, with a view to have the RVSM post-implementation safety analysis ready before MIDANPIRG/10 meeting.

4.10 The meeting then agreed to include those States that have not provided the required data to the MID RMA, in the MIDANPIRG List of air navigation deficiencies.

4.11 The meeting was appraised of the activities of the MID RMA Board related to the MID RMA funding mechanism and cost sharing arrangements and noted that the MID RMA Board/3 meeting, Muscat, Oman, 24-25 November 2006 will address this issue. The meeting recalled also that according to its Terms of Reference, the MID RMA Board is to inform MIDANPIRG of its activities through the ATM/SAR/AIS Sub Group. Based on the above and considering that the MID RMA Board/3 meeting might amend the previous MID RMA Board conclusions, the meeting decided that for this session the activities of the MID RMA Board be reported directly to MIDANPIRG and not as part of the ATM/SAR/AIS SG/8 meeting report.

4.12 The meeting noted that the RVSM TF/12 meeting reviewed some ATC operation aspects pertaining to RVSM operations including the requirements for ATS routes, the communications problems between ACCs and within some FIRs (mainly Baghdad FIR) and the problems associated with the delay in the processing/transmission of flight plans (FPLs). The meeting addressed also the issue of implementation of RVSM within Baghdad and Kabul FIRs and noted with concern the difficulties Afghanistan and Iraq are facing to set up an appropriate independent (national) ATC system. The main problems are related to the communication infrastructure, the availability and training of the air traffic controllers and the uncoordinated military activities. The meeting noted that implementation of RVSM within Baghdad FIR is not a priority at present since the pre-requisites for this are not met/available and that a period of two years would be sufficient for Afghanistan to meet the ICAO requirements to go ahead with the RVSM implementation.

4.13 The meeting was also appraised about the outcome of the Second Inter-Regional Coordination Meeting between ICAO APAC, EUR/NAT and MID Regional Offices (IRCM/2), 11-13 September 2006 in Paris, related to the implementation of RVSM in the interface area between the EUR and MID Regions. The meeting noted, in this regard, that the EUR/NAT Office would convene a Meeting of States in order to co-ordinate the RVSM implementation in Ashkhabad FIR between Turkmenistan and the adjacent States (Azerbaijan, Afghanistan, Kazakhstan, Iran and Uzbekistan).

ATM/SAR/AIS SG/8
Report on Agenda Item 4

4.14 Based on the above, the meeting agreed to the following Draft Conclusions:

DRAFT CONCLUSION 8/5: PROVISION OF DATA FOR THE DEVELOPMENT OF THE RVSM POST-IMPLEMENTATION SAFETY ANALYSIS

That, in accordance with MIDANPIRG/9 Conclusion 9/23 and with a view to have the RVSM post-implementation safety analysis ready before MIDANPIRG/10 meeting:

- a) *States, who have not yet done so, provide the required data to the MID RMA as soon as possible;*
- b) *States not providing the required data to the MID RMA, in accordance with the requirements of safety monitoring agencies, be included in the MIDANPIRG List of air navigation deficiencies;*
- c) *the MID RMA ensure that the requests for provision of data are extended to MID States' RVSM Programme Managers and their Alternates in order to carry out the necessary internal coordination and speed up the process of collection of data; and*
- d) *States ensure that good communication and cooperation between the RVSM Programme Managers and the MID RMA Board Members is established and observed.*

DRAFT CONCLUSION 8/6: SPECIAL BAGHDAD FIR COORDINATION MEETING

That, with a view to address coordination issues between Iraq and its adjacent States, a Special Baghdad FIR Coordination Meeting be organized under the aegis of ICAO with the attendance of Iraq, Iran, Jordan, Kuwait, Saudi Arabia, Syria, Turkey, IATA, IFALPA, FAA, the Combined Forces Air Component Commander (CFACC) and the MID RMA.

DRAFT CONCLUSION 8/7: SURVEY RELATIVE TO THE IMPROPER HANDLING OF FPLS AND ASSOCIATED ATS MESSAGES

That,

- a) *the methodology for the identification of causes of improper handling of FPLs and associated ATS messages at **Appendix 4A** to the report on Agenda Item 5 is endorsed; and*
- b) *States carry out a survey relative to the improper handling of FPLs and associated ATS messages based on this methodology for a period of at least one month.*

DRAFT CONCLUSION 8/8: FLEXIBLE HANDLING OF TRAFFIC INTENDING TO USE THE RVSM AIRSPACE

That, in accordance with the provisions of the ATC MANUAL FOR A REDUCED VERTICAL SEPARATION MINIMUM (RVSM) IN THE MID REGION, and with a view to enhance the safety and efficiency of air navigation in the MID Region:

ATM/SAR/AIS SG/8
Report on Agenda Item 4

- a) *States are urged to refrain from taking actions unilaterally to systematically penalize the flights intending to use the RVSM airspace when:*
 - i) *there's a doubt about the aircraft's RVSM approval status (missing of letter "W" from the FPL); or*
 - ii) *the FPL was not received; and*
- b) *States are invited to show more flexibility in dealing with this issue.*

METHODOLOGY FOR THE IDENTIFICATION OF CAUSES OF IMPROPER HANDLING OF FPLS AND ASSOCIATED ATS MESSAGES

For a period of at least one month, MID States should carry out a survey to identify (by origin):

- a) The total number of flights.
- b) The number of incidents where a FPL has not been received (FPL not transmitted, incorrect address, AFTN switch failure at origin, AFTN switch failure en-route, handling error).
- c) The number of incidents where a FPL has been received but the letter "W" was missing.
- d) The number of incidents where a FPL has been received but with incorrect details (FPL/estimate mismatch).
- e) The number of incidents where a FPL has been received late.
- f) The number of incidents where a CNL message was received for the FPL.
- g) Incident related to the handling of FPL due to any other cause.

To carry out the survey, States have to handle the here-above mentioned incidents as follows:

- a) each incident has to be recorded in a specific log file;
- b) the incident is investigated and the log is annotated with reasons, if available;
- c) a fax is sent to the Civil Aviation Authority at the point of departure of the flight, requesting for investigation of the problem;
- d) the log file is updated based on the received reply; and
- e) each originating State is informed of the findings with copy to the ICAO MID Regional Office in order to facilitate follow-up action.

Having completed the above, the data gathered from the survey should be analysed to determine the major causes related to the improper handling of FPLs and associated ATS messages.

ATM/SAR/AIS SG/8
Report on Agenda Item 5

REPORT ON AGENDA ITEM 5: SSR CODE ALLOCATION PLAN (CAP) FOR THE MID REGION

5.1 Under this agenda item, the meeting recalled that MIDANPIRG/9 meeting, when discussing the issue of SSR code allocation, noted that in accordance with established procedures, the ICAO MID Regional Office has been assigning codes to MID States upon request from the list of SSR codes which have been assigned to the MID Region. It was however, emphasized that taking into account the sustained traffic growth in the MID Region, the assignment of codes has to be properly managed/handled, otherwise, the MID Region may soon face the same shortage of codes as being experienced in Europe.

5.2 The meeting appreciated a presentation by EUROCONTROL on the methodology of Originating Region Code Assignment Method (ORCAM) which has been developed to ensure that each aircraft in ORCAM area of applicability will be assigned discrete code. The meeting noted that the EUR Region is continuing its efforts to identify solutions to alleviate code shortage occurrences and to reduce the risks of code conflicts. These include the establishment of Centralized SSR Code Assignment and Management System (CCAMS).

5.3 The meeting was informed that the Second Inter-Regional Coordination Meeting (IRCM/2) between ICAO APAC, EUR/NAT and MID Regional Offices noted that the inter-regional coordination of SSR code allocation was an issue that needed urgent attention, especially between MID and EUR Regions. It was also highlighted that the IRCM/2 was of the opinion that the MID Region, in order to solve acute problems related to the shortage of SSR codes should explore the possibility of implementation of multiple Participating Areas (PAs) in accordance with ORCAM principles.

5.4 The meeting noted that in accordance with MID FASID (Doc 9708) the series of SSR codes 4100-4177 is assigned to Tehran ACC for transit flights. Furthermore a complaint was received from Iran regarding the use by Baku ACC (Azerbaijan) of the SSR block codes 4100-4137. An investigation with the EUR/NAT Office has shown that this block of codes has been allocated to Baku ACC after the circulation of an Amendment Proposal to concerned States including Iran, which had not raised any objection regarding the assignment of the code blocks 4100 - 4137 to Azerbaijan. Accordingly, Iran was requested to stop using the part of the Code Series 41 allocated to Azerbaijan, at least in a buffer area adjacent to Baku FIR, in order to avoid any potential code conflict between Iran and Azerbaijan.

5.5 The meeting also recalled that during a multi-lateral meeting held in Muscat, 3-4 July 2006, attended by representatives from Bahrain, Oman, Saudi Arabia and UAE, it was mentioned that some aircraft, intending to enter Muscat FIR, were being coordinated with SSR codes that were not accepted by the Muscat ATC system. The SSR codes that were not in compliance with the States' assigned list of codes were rejected by the ATC systems, which resulted in aircraft entering the FIR on a limited data block. To get the full data block entails extra work for the Controller and could distract him at a critical moment.

5.6 Oman had also brought to the attention of the MID Regional Office that some FPLs received in the Muscat FIR originating in the Asia Pacific Region contained SSR mode A code in the aircraft identifier box item 7. It was highlighted that these codes are identified by automated systems and may be used when the FPL is activated by estimate input, which would cause the use of a squawk that creates conflict. It was also reiterated that the removal of the code imposes extra workload on the Air Traffic Controllers. With a view to avoid the undesired activation of SSR codes, the meeting urged States and operators to cease transmitting SSR codes in departure messages.

ATM/SAR/AIS SG/8
Report on Agenda Item 5

5.7 The meeting noted that this issue has been brought to the attention of the ICAO APAC Regional Office, which took the necessary action with the APAC States, accordingly.

5.8 The meeting discussed some of the problems related to the SSR code allocation experienced in the MID Region and agreed to the establishment of a Study Group, to study various issues relating to the duplication and other problems associated with the allocation and shortage of SSR Codes, and propose solutions.

5.9 Accordingly, the meeting developed the following Draft Decision:

DRAFT DECISION 8/9: ESTABLISHMENT OF A MID REGION SSR CODE STUDY GROUP

*That, the MID Region SSR Code Study Group be established with the terms of reference as at **Appendix 5A** to the report on Agenda Item 5.*

5.10 The meeting agreed that the Study Group would consider the possibility of implementation of multiple PAs in accordance with the ORCAM principles. However, the meeting was of view that in studying the concept of multiple PAs, the Study Group has to take into consideration the following:

- the introduction of multiple PAs would increase the number of Transit codes required for assignment to aircraft. It should be noted that in addition to international departures, which require Transit code assignment, the number of flights entering an FIR from another PA require a Transit code, whereas an overflight entering the airspace from an FIR within the same PA and exiting to an FIR outside the PA does not require code assignment;
- the de-correlation in association with code change will interfere with arrival management systems for busy airports and can only be avoided through substantial and costly system upgrades; and
- major areas of traffic flows should be taken into consideration. In this regard, UAE requested that, in case the concept of multiple PAs is to be implemented in the MID Region, UAE should be in the same PA with Bahrain, Iran and Oman.

ATM/SAR/AIS SG/8
Appendix 5A to the Report on Agenda Item 5

STUDY GROUP ON THE ALLOCATION OF SSR CODES

TERMS OF REFERENCE

- 1- Determine the SSR Code allocation system problems in the MID Region.
- 2- Determine measures that can be applied in the short term to address this system problem.
- 3- Determine the advantages of single versus multiple PAs.
- 4- Analyze the development of PAs taking into consideration the following:
 - Defining the boundaries of PAs
 - Operational consideration for the PAs
 - Volume of traffic
 - Number of adjacent FIRs
 - Climb/descent areas
 - National defense requirements
 - Automation system limitations
 - Duration of code usage within a particular FIR
- 5- Determine measures that can be applied in the long term.
- 6- The Study Group should have mandate to discuss with adjacent regions without having to go through ATM/SAR/AIS SG.
- 7- Through the Rapporteur (Mr. Saud Humaid Al-Adhoobi from Oman) the Study Group will co-ordinate the frequency, location and time of meetings.
- 8- The Study Group will consist of the following States and Organizations :

STATES

Egypt, Iran, Oman, Saudi Arabia, Syria and UAE.

ORGANIZATIONS (AS OBSERVERS)

IATA, ICAO and, when required, EUROCONTROL.

ATM/SAR/AIS SG/8
Report on Agenda Item 6

REPORT ON AGENDA ITEM 6: ATS SAFETY MANAGEMENT SYSTEMS AND INCIDENT ANALYSIS

6.1 Under this agenda item, the meeting recalled that MIDANPIRG/9 meeting noted the lack of interest showed by States in providing comprehensive data on ATS incidents since very few incident reports were forwarded to consolidate the IATA database. Accordingly, the objectives of the ATS Incident Analysis Task Force were far from being met. Based on the above, MIDANPIRG decided that the Task Force be disbanded and that the ATS incident analysis activity be carried out within the framework of the ATM/SAR/AIS Sub-Group in close cooperation with IATA which maintains a database related to ATS incidents in the MID Region.

6.2 The meeting noted that IATA's database has been established based on reports provided by participating airlines and ATS Service Providers. However, it does not contain all the ATC incidents experienced by airlines. It was highlighted that IATA and ICAO were not systematically receiving safety-related reports in sufficient number allowing for the analysis of the information, the identification of trends and for the initiation of appropriate action. In this regard, the meeting expressed concern about the low level of reporting of ATS incidents and recognized that, unless incident reports are received from all concerned parties (Pilots and ATCs), the analysis of data received may seem to be biased.

6.3 It was reiterated that it is not the intent of neither IATA nor the Airlines to identify or categorize States or FIRs as good or bad. The reports do not apportion blame to any party involved but the objective is to help identify deficiencies in the region and actions that can be taken to reduce risk of midair collisions.

6.4 The analysis of the reports received showed that the main areas of concern are the following:

- lack of VHF/HF, i.e. communication between Pilot/ATC and ACC Centres;
- Pilot/Controller proficiency;
- monitoring of ATC frequency and reporting points by Pilots;
- ATC wrong clearances led to conflict traffic resulted in triggering TCAS, runway incursion, and wrong runway in use;
- filing of Flight Plans: increasing cases of non receipt of FPL resulted in enroute hold, Flight Level drop and extra workload;
- military activities;
- lack of MET Reports; and
- late notification of ATS incident reports.

6.5 The meeting recognized that the incidents analysis showed complex interrelationship between causal factors attributed to air traffic services and flight operations. It was also noted that most of potential conflicts have been detected by TCAS (ACAS II).

6.6 To ensure that incident reports are sent by operators, and are received in good time at the appropriate ATS unit, the meeting agreed that States designate focal points to whom operators can send incident reports for investigation and resolution and from whom they could request information for clarification purpose.

ATM/SAR/AIS SG/8
Report on Agenda Item 6

6.7 The meeting recalled that in September 2004, the 35th Session of the Assembly, in adopting Resolution A35-7 – Unified Strategy to resolve safety-related deficiencies, recognized that transparency and sharing of safety information is one of the fundamental tenets of a safe air transportation system.

6.8 The meeting recalled also that in March 2006, the Directors General of Civil Aviation Conference on a global strategy for aviation safety (DGCA/06) has concluded that transparency is a cornerstone of aviation safety, that concerned stakeholders should cooperate to secure access to the information necessary to manage safety properly, and that States should implement safety management systems across all safety-related disciplines.

6.9 The meeting recognized that one main element of a Safety Management System (SMS) is the collection of data and safety-related information allowing for the identification of hazards, the assessment and mitigation of associated risks. The establishment of a reporting system within an organization is therefore necessary for the identification of hazards and assessment of risks in order to implement appropriate mitigating measures. Most of the information collected in an organization's SMS might only be relevant for that organization. However, some elements could be of interest for a larger community and should be reported in the Safety Management Programme of the responsible Civil Aviation Authority, which in turn should also analyse and report the information to an established regional/sub-regional and a global system, as appropriate. This chain of reporting mechanisms is essential to bring safety-related information to those in a position to do something about it while sharing it with a wider aviation community to draw their attention to identified hazards.

6.10 With a view to foster a just culture environment and implement effective reporting systems, the meeting emphasized that States need to put strong efforts to initiate legislative changes. In this regard, the meeting recalled that, as a follow-up to the DGCA/06 Conference, the ALLPIRG/5 meeting held in Montreal 23-24 March 2006, addressed areas of Air Traffic Management (ATM) safety requiring urgent, high-priority attention and a number of inhibitors to progress were identified, which continue to need collective action by States, such as the establishment of national safety bodies, the availability of training in the disciplines of safety management and safety regulation, and the lack of an open and just reporting environment – a “Just Culture”. Accordingly, ALLPIRG/5 developed the following conclusion:

CONCLUSION 5/11: AIR TRAFFIC MANAGEMENT (ATM) SAFETY MANAGEMENT

That, ICAO:

- a) urge States to give priority to the establishment and effective operation of their ATM safety management and safety regulatory functions;*
- b) support the development of sufficient expertise levels in the industry through formal training in ATM safety issues and, by cooperation through regional bodies, promote collective means to optimize the effectiveness of training provision; and*
- c) develop further measures to enable the implementation of a “just-culture” reporting environment to facilitate the reporting of ATM occurrences.*

ATM/SAR/AIS SG/8
Report on Agenda Item 6

6.11 Based on the above, the meeting agreed to the following draft Conclusion, which is proposed to replace and supersede MIDANPIRG/9 Conclusion 9/19 and Decision 9/20:

DRAFT CONCLUSION 8/10: REPORTING MECHANISM AND SHARING OF SAFETY-RELATED INFORMATION

That, States:

- a) *update their legislation to support a “just culture” reporting environment as part of their safety programme;*
- b) *develop and implement non-punitive reporting mechanisms as part of their safety programme for the identification of hazards and assessment of risks in order to implement appropriate mitigating measures;*
- c) *designate focal points to whom operators can send incident reports for investigation and resolution and from whom they could request information for clarification purpose; and*
- d) *share information on ATS incidents and accidents.*

6.12 The meeting recognized that the implementation of SMS within MID States' Air Traffic Services is an important issue which requires urgent and high-priority attention by States and recalled that the 35th Session of the Assembly agreed that ICAO should make recommendations for the achievement of global harmonization in the uniform application of ICAO provisions for safety management. As a follow up action, the ICAO Council adopted in March 2006 harmonized safety management provisions in Annexes 6, 11 and 14 requiring States to establish a safety management programme in which aerodrome operators, air traffic services providers and air operators are required to implement a Safety Management System (SMS) acceptable to the Authority. The harmonized provisions are applicable as of 23 November 2006 for national authorities, aerodromes operators and air traffic services providers and as of 1 January 2009 for air operators. With regard to Air Traffic Services, Amendment 44 to Annex 11, introduced revised standards, as well as guidance material on the concept of acceptable level of safety, in response to the need to complement the prevailing approach to the management of safety based upon regulatory compliance with a performance-based approach. Accordingly, Annex 11 paragraphs 2.26.1 and 2.26.2 are amended as follows: “2.26.1 — *States shall establish a safety programme in order to achieve an acceptable level of safety in the provision of ATS*” and “2.26.2 — *The level of safety to be achieved shall be established by the State(s) concerned*”.

6.13 The meeting noted that as part of the State's safety programme, the Air Traffic Service Providers shall be required to implement a Safety Management System acceptable to the State. The SMS shall as a minimum:

- a) identify safety hazards;
- b) ensure that remedial action necessary to maintain an acceptable level of safety is implemented;
- c) provide for continuous monitoring and regular assessment of the safety level achieved; and
- d) aim to make continuous improvement to the overall level of safety.

ATM/SAR/AIS SG/8
Report on Agenda Item 6

6.14 The meeting was informed that further guidance on SMS is contained in the ICAO Safety Management Manual (Doc 9859) which is available for download from the ICAO public website (<http://www.icao.int/anb/safetymanagement/Documents.html>) and that associated procedures related to SMS are contained in the PANS-ATM (Doc 4444).

6.15 The meeting noted also that an ICAO SMS training course aimed at officials from civil aviation administrations has been designed. The objectives of the course are to develop participants' knowledge of safety management concepts and ICAO safety management requirements in Annexes 6, 11 and 14, and related guidance material, as well as knowledge and skills to certify and oversee the implementation of SMS by operators and service providers, in compliance with ICAO requirements. In this regard, the meeting noted with appreciation that in the MID Region, the "Implementation of SMS in States Training Course" will be hosted by Egypt from 21 to 25 May 2007.

6.16 The meeting noted that no precise information is available about the status of implementation of SMS within the MID States' Air Traffic Services. However, it is known that many States in the region have not yet implemented the required SMS. The meeting recognized the major inhibitors for the implementation of SMS are: the resistance to change and the misunderstanding of SMS.

6.17 The meeting recognized that one of the first steps required from an organization for the implementation of SMS is to find out exactly what is already in place within the organization and identify what remains to be developed and implemented. In SMS terms, this is called a "gap analysis". In other words, it can be stated that most of the elements of a Safety Management System may perhaps have been implemented but do not necessarily constitute an organized system.

6.18 The meeting pointed out that implementing SMS within an organization will require dedication and commitment from the very top of the organization involving all departments at all levels. Implementation of SMS is not a mere casual exercise, a paper-only exercise or a directive imposed by management.

6.19 Based on the above the meeting agreed to the following Draft Conclusion which is proposed to replace and supersede MIDANPIRG/9 Conclusion 9/8:

DRAFT CONCLUSION 8/11: SURVEY ON ATS SAFETY MANAGEMENT

That,

- a) States, that have not yet done so, are urged to establish a safety programme in order to achieve an acceptable level of safety in the provision of ATS;*
- b) with a view to obtain information from MID States regarding the status of implementation of SMS within their Air Traffic Services and/or the difficulties they face to implement the required system, ICAO MID Regional Office carry out a survey on the implementation of SMS; and*
- c) States take advantage of the SMS guidance material available and training courses offered by ICAO.*

ATM/SAR/AIS SG/8
Report on Agenda Item 7

REPORT ON AGENDA ITEM 7: CONTINGENCY PLAN

7.1 Under this agenda item, the meeting recalled that the guidance material related to contingency planning was first approved by the ICAO Council in 1984. The material was subsequently amended and amplified in light of experiences over the years and has now been presented as Attachment D to Annex 11.

7.2 The meeting noted and acknowledged the importance of the provisions of Annexes 11 and 15 in relation with the development and promulgation of contingency plans. However, the meeting noted with concern that the implementation of contingency plans in the MID Region remains far below expectation. The meeting noted that a contingency plan is under development in Bahrain and Oman and a draft contingency plan for Syria is already available.

7.3 The meeting recognized that the development and promulgation of contingency plans is a complex exercise which requires time for the coordination with the concerned parties, including ICAO, ATS users and adjacent States/FIRs.

7.4 The meeting recalled that MIDANPIRG/9 was of the view that the MIDANPIRG subsidiary bodies should develop regional guidance material allowing the Air Navigation Service Providers and Users to maintain the air navigation activities during contingency situations in the MID Region, and accordingly developed Decision 9/41 as follows:

DECISION 9/41: MID REGIONAL CONTINGENCY PLAN FOR ATM/CNS

That,

- a) the relevant subsidiary bodies of MIDANPIRG revise their Terms of Reference (TOR) to include the development of regional guidance material leading to a MID Regional Contingency Plan for ATM including supporting CNS elements; and*
- b) the MID Regional Contingency Plan be updated by the relevant MIDANPIRG subsidiary bodies on regular basis.*

7.5 In order to further enhance the effectiveness of contingency planning and implementation, the meeting invited States to use the template at **Appendix 7A** to the report on Agenda Item 7, which is commonly used in other ICAO Regions. The main objective of the template is to reduce diversity in the development of the various States' contingency plans.

7.6 In view of the above, the meeting agreed to the following Draft Conclusion, which is to replace and supersede MIDANPIRG Conclusion 8/19 and Decision 9/41.

DRAFT CONCLUSION 8/12: DEVELOPMENT AND PROMULGATION OF CONTINGENCY PLANS

That,

- a) States are urged to develop and promulgate contingency plans in accordance with Annex 11 and Annex 15 provisions;*

ATM/SAR/AIS SG/8
Report on Agenda Item 7

- b) *ICAO MID Office carry out a survey on the status of development and promulgation of contingency plans in the Region;*
- c) *States use the template at **Appendix 7A** to the report on Agenda Item 7 for the development and promulgation of contingency plans; and*
- d) *the relevant subsidiary bodies of MIDANPIRG revise their Terms of Reference (TOR) to include the development of regional guidance material leading to a MID Regional Contingency Plan for ATM including supporting CNS elements.*

ATM/SAR/AIS SG/8
Appendix 7A to the Report on Agenda Item 7

**ATM REGIONAL CONTINGENCY PLAN
FOR CTA/UTA/FIR**

OBJECTIVE: This contingency plan contains arrangements to ensure the continued safety of air navigation in the event of partially or total disruption of air traffic services (ATS) and is related to ICAO Annex 11- *Air Traffic Services* Chapter 2, paragraph 2.28. The contingency plan should be designed to provide alternative routes, using existing airways in most cases, which will allow aircraft operators to fly through or avoid airspace within the (XXX) CTA/UTA/FIR.

AIR TRAFFIC MANAGEMENT

ATS Responsibilities

Tactical ATC considerations during periods of overloading may require re-assignment of routes or portions thereof.

Alternative routes should be designed to maximize the use of existing ATS route structures and communication, navigation and surveillance services.

In the event that ATS cannot be provided within the (XXX) CTA/UTA/FIR, the Civil Aviation Authority shall publish the corresponding NOTAM indicating the following:

- a) Time and date of the beginning of the contingency measures;
- b) Airspace available for landing and overflying traffic and airspace to be avoided;
- c) Details of the facilities and services available or not available and any limits on ATS provision (e.g., ACC, APP, TWR and FIS), including an expected date of restoration of services if available;
- d) Information on the provisions made for alternative services;
- e) ATS contingency routes;
- f) Procedures to be followed by neighbouring ATS units;
- g) Procedures to be followed by pilots; and
- h) Any other details with respect to the disruption and actions being taken that aircraft operators may find useful.

In the event that the CAA is unable to issue the NOTAM, the (alternate) CTA/UTA/FIR will take action to issue the NOTAM of closure airspace upon notification by corresponding CAA or the ICAO NACC Regional Office.

Separation

Separation criteria will be applied in accordance with the *Procedures for Air Navigation Services-Air Traffic Management* (PANS-ATM, Doc 4444) and the *Regional Supplementary Procedures* (Doc 7030).

Level Restrictions

Where possible, aircraft on long-haul international flights shall be given priority with respect to cruising levels.

Other measures

Other measures related to the closure of airspace and the implementation of the contingency scheme with the (XXX) CTA/UTA/FIR may be taken as follows:

- a) Suspension of all VFR operations;
- b) Delay or suspension of general aviation IFR operations; and
- c) Delay or suspension of commercial IFR operations.

TRANSITION TO CONTINGENCY SCHEME

During times of uncertainty when airspace closures seem possible, aircraft operators should be prepared for a possible change in routing while en-route, familiarization of the alternative routes outlined in the contingency scheme as well as what may be promulgated by a State via NOTAM or AIP.

In the event of airspace closure that has not been promulgated, ATC should, if possible, broadcast to all aircraft in their airspace, what airspace is being closed and to stand by for further instructions.

ATS providers should recognize that when closures of airspace or airports are promulgated, individual airlines might have different company requirements as to their alternative routings. ATC should be alert to respond to any request by aircraft and react commensurate with safety.

TRANSFER OF CONTROL AND COORDINATION

The transfer of control and communication should be at the common FIR boundary between ATS units unless there is mutual agreement between adjacent ATS units. ATS providers should also review current coordination requirements in light of contingency operations or short notice of airspace closure.

PILOTS AND OPERATOR PROCEDURES

Pilots need to be aware that in light of current international circumstances, a contingency routing requiring aircraft to operate off of normal traffic flows, could result in an intercept by military aircraft. Aircraft operators must therefore be familiar with international intercept procedures contained in ICAO Annex 2 – *Rules of the Air*, paragraph 3.8 and Appendix 2, Sections 2 and 3.

Pilots need to continuously guard the VHF emergency frequency 121.5 MHz and should operate their transponder at all times during flight, regardless of whether the aircraft is within or outside airspace where secondary surveillance radar (SSR) is used for ATS purposes. Transponders should be set on a discrete code assigned by ATC or select code 2000 if ATC has not assigned a code.

If an aircraft is intercepted by another aircraft, the pilot shall immediately:

- a) Follow the instructions given by the intercepting aircraft, interpreting and responding to visual signals in accordance with international procedures;
- b) Notify, if possible, the appropriate ATS unit;
- c) Attempt to establish radio communication with the intercepting aircraft by making a general call on the emergency frequency 121.5 MHz and 243 MHz if equipped; and
- d) Set transponder to code 7700, unless otherwise instructed by the appropriate ATS unit.

If any instructions received by radio from any source conflict with those given by the intercepting aircraft, the intercepted aircraft shall request immediate clarification while continuing to comply with the instructions given by the intercepting aircraft.

OVERFLIGHT APPROVAL

Aircraft operators should obtain overflight approval from States/Territories/International Organizations for flights operating through their jurisdiction of airspace, where required. In a contingency situation, flights may be rerouted at short notice and it may not be possible for operators to give the required advanced notice in a timely manner to obtain approval. States/Territories/International Organizations responsible for the airspace in which contingency routes are established should consider making special arrangements to expedite flight approvals in these contingency situations.

CONTINGENCY UNIT

The ATM national contingency unit assigned the responsibility of monitoring developments that may dictate the enforcement of the contingency plan and coordination of contingency arrangements is:

Name of Agency:
Contact Person:
Telephone:
Fax:
Email:

During a contingency situation, the National Contingency Unit will liaise with the involved FIRs through the ICAO NACC Regional Office.

The ICAO NACC Office will:

- a) closely monitor the situation and coordinate with all affected States/Territories/International Organizations and the IATA Regional Office, so as to ensure air navigation services are provided to international aircraft operations in the CAR Region;
- b) take note of any incidents reported and take appropriate action;
- c) provide assistance as required on any issue with the Civil Aviation Administrations involved in the contingency plan; and

- d) keep the President of the Council of ICAO, the Secretary General, C/RAO, D/ANB and C/ATM continuously informed on developments, including activation of the contingency plan.

REROUTING SCHEME

In the event of closure the (XXX) CTA/UTA/FIR, aircraft operators should file their flight plans using the alternative contingency routes listed in the scheme below in order to ensure avoidance in that airspace (CTA/UTA/FIR).

Present ATS ROUTE	CONTINGENCY ROUTINGS	FIRs INVOLVED
In lieu of:	(ATS unit) provides ATC on the following routings: CR1: CR2: CR3:	XXX: In coordination with XXX
In lieu of:	(ATS unit) provides ATC on the following routing: CR4:	XXX: In coordination with XXX

All aircraft should establish and maintain contact on published VHF or HF frequencies with the (XXX) ATS unit (APP/ACC/FIC) responsible for the airspace being traversed.

LIST OF POINTS OF CONTACT OF ALL CONCERNED STATES/TERRITORIES/INTERNATIONAL ORGANIZATIONS, IATA AND ICAO NACC OFFICE.

State/ International Organization	Point of Contact	Telephone/Fax	E-mail
		Tel. Fax.	
		Tel. Fax.	
		Tel. Fax.	
IATA		Tel. Fax:	
ICAO	Raymond Ybarra Víctor Hernández	Tel.: (5255) 5250 3211 Fax: (5255) 5203 2757 AFTN: MMMXICOX	rybarra@mexico.icao.int vhernandez@mexico.icao.int icao_nacc@mexico.icao.int

ATM/SAR/AIS SG/8
Report on Agenda Item 8

REPORT ON AGENDA ITEM 8: STATUS OF IMPLEMENTATION OF SEARCH AND RESCUE (SAR) PROVISIONS

8.1 Under this agenda item, the meeting recalled that the basic principles, operational requirements and planning criteria related to search and rescue services, have been developed for the MID Region. It was pointed out that these requirements are considered as the minimum necessary for effective planning of SAR facilities and services and are indicated in the SAR Part of the MID Basic Air Navigation Plan (Basic ANP).

8.2 The meeting reviewed the SAR requirements in the MID Basic ANP and the detailed description/list of facilities and/or services to be provided to fulfil these requirements indicated in the FASID Table SAR 1 and raised concern about the low level of implementation of SAR agreements between neighbouring States in the MID Region. However, it was noted with appreciation that.

8.3 It was mentioned in this regard that paragraph 3.1.5 of Annex 12 states that *"contracting States should enter into agreements with neighbouring States to strengthen search and rescue cooperation and coordination setting forth the conditions for entry of each others search and rescue units into their respective territories. These agreements should also provide for expediting entry of such units with the least possible formalities"*.

8.4 The meeting made reference also to paragraph 4 of Chapter 7 of the MID Basic ANP where it is stated the following: to promote greater efficiency and economy in the provision and use of available search and rescue (SAR) facilities, States providing SAR services in adjacent search and rescue regions (SRRs) should enter into formal arrangements for mutual assistance in order to:

- a) help meet and exceed the minimum requirements specified in Table SAR 1 at minimal cost;
- b) ensure full SRR coverage;
- c) provide for technical and operational SAR co-operation and co-ordination;
- d) establish common SAR procedures, where practicable;
- e) conduct joint training and exercises, as appropriate, to maximize proficiency; and
- f) promote effective liaison between air traffic services and RCC personnel within and between the States involved.

8.5 The meeting noted that SAR agreements are particularly important for border areas where concerns for sovereignty and saving lives must be balanced, high sea areas, and inhospitable areas where rapid response is essential to successful SAR operations.

8.6 The meeting noted with appreciation that SAR agreements are under development between Egypt with Cyprus and Syria with Turkey and accordingly urged MID States to follow their foot steps recalling that a model SAR agreement was adopted by MIDANPIRG/5 in 1998. The International Aeronautical and Maritime Search and Rescue Manual (IAMSAR Manual, Doc 9731) contains also an example of SAR agreement. The meeting was of the view that these models could be used by States when developing their SAR agreements.

8.7 Based on the above, the meeting agreed to the following Draft Conclusion:

DRAFT CONCLUSION 8/13: SAR AGREEMENTS

That, with a view to strengthen search and rescue cooperation and coordination:

- a) *States are urged to sign SAR agreements with their neighboring States; and*
- b) *the model of SAR agreement available in the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR Manual) attached as **Appendix 8A** to the report on agenda item 8, be used to guide States in the development of their own SAR agreements.*

8.8 The meeting recalled that on 28 April 2006, the ICAO Secretary General sent a Letter to all States on the commissioning of the International 406 MHz Beacon Registration Database (IBRD), which became operational on 16 January 2006.

8.9 The meeting noted that IBRD signals is maintained by the Cospas-Sarsat Secretariat as an important supporting element of the satellite alert location system that detects and distributes emergency signals transmitted by 406 MHz Emergency Locator Transmitters (ELTs).

8.10 It was highlighted that when a 406 MHz ELT signal is relayed through the Cospas-Sarsat system, SAR Authorities can, using the ELT identification, interrogate a registration database and retrieve characteristics of the subject aircraft and contact details of the ELT owner. This system could operate effectively only if owners register their ELTs and SAR providers have access to registration databases.

8.11 The meeting noted that the IBRD is not intended to replace existing national ELT registration facilities. It is provided by Cospas-Sarsat to supplement the 406 MHz registration process by providing 24-hour access and to assist SAR service providers in retrieving valuable data during SAR operation. SAR service providers will be able to query the IBRD directly over the Internet at: www.406registration.com, which is freely available. The process for registering an ELT is elaborated at the Cospas-Sarsat website at: www.cospas-sarsat.org.

8.12 It was underlined that the Cospas-Sarsat will cease processing of 121.5/243 MHz ELTs from 1 February 2009 and only 406 MHz ELTs will be detected. Accordingly, all ELT owners and users of 121.5/243 MHz ELTs should upgrade to 406 MHz on a timely manner and in any case before 1 February 2009.

8.13 Based on the above, the meeting agreed to the following Draft conclusion:

DRAFT CONCLUSION 8/14: 406 MHZ BEACON REGISTRATION DATABASE (IBRD)

Taking into consideration that:

- i) *the International 406 MHz Beacon Registration Database (IBRD) became operational on 16 January 2006;*
- ii) *the service that Cospas-Sarsat System can provide to users of 406 MHz ELTs is much enhanced over that available to 121.5 ELT users; and*

ATM/SAR/AIS SG/8
Report on Agenda Item 8

- iii) *Cospas-Sarsat will cease processing of 121.5/243 MHz ELTs from 1 February 2009;*

That, accordingly:

- a) *all ELT owners and users of 121.5/243 MHz ELTs are invited to upgrade to 406 MHz ELT as soon as possible and in any case before 1 February 2009;*
- b) *all ELT owners register their 406 MHz ELTs in the IBRD database; and*
- c) *States are invited to designate an IBRD focal point and request that Cospas-Sarsat allocate for him a user identification and password with a view to access the IBRD database and take full advantage of the service available.*

IAMSAR MANUAL
(Volume I)

SAR AGREEMENTS

Notes regarding SAR agreements, and the sample agreement that begins on the following page:

Parties may be organizations within a State, maritime and/or aeronautical SAR authorities of two or more different States (particularly with neighbouring search and rescue regions), or higher authorities of two or more States, i.e., the sample agreement can be adapted for local, national, or international use.

Each section of the sample agreement may be optionally used or adapted as the Parties agree, bearing in mind consistency with the principles of international law, and the goals of IMO, ICAO and the States and organizations concerned.

It is generally advisable to include specific information, such as phone numbers or addresses, in appendices or other documents separate from the basic signed agreement.

When SRRs are addressed in the agreements, normally only the lines separating the SRRs of the Parties are described, since other delimitation of the SRRs would normally involve States other than the Parties. Agreements between national organizations may or may not need to address geographic areas of responsibility. It should be recognized among the Parties that the establishment of SRRs is mainly for ensuring the availability of SAR services, and to facilitate proper distribution of distress alerts to RCCs; SRRs should not be viewed as affecting political boundaries, and do not need to align with political boundaries if the Parties so agree for the sake of improving or simplifying SAR operations. SRR delimitation over international waters is not intended to obstruct the provision of SAR services in any way. Furthermore, the provision of SAR services within an SRR shall be without regard to the nationality or circumstances of the persons in distress.

If agreements discuss territorial entry for SAR, provisions should account for a balance of concerns for sovereignty and concerns for saving lives.

The concept of "territory" is understood to include territorial land, airspace and seas.

It is advisable that SAR agreements address sensitive issues to the degree necessary for practical SAR co-operation between or among the Parties, while emphasizing the humanitarian nature of SAR, and avoiding topics which are unrelated to SAR, or which are both politically sensitive and unnecessary.

**Agreement on [Aeronautical and/or Maritime] Search and Rescue between
[name the Parties]**

1. INTRODUCTION

Knowing the importance of co-operation in search and rescue (SAR), and of the provision of expeditious and effective SAR services;

Desiring to support the provisions of the [International Convention on Maritime Search and Rescue of the International Maritime Organization (IMO) and/or the Convention on International Civil Aviation of the International Civil Aviation Organization (ICAO)]; and

Seeking to provide an overall plan for SAR co-ordination, use of available resources, mutual assistance, and efforts to improve SAR services;

The Parties have agreed as follows:

2. EXTENT OF ASSISTANCE

The Parties agree to co-operate in the following areas:

- (a) Support each other by pooling SAR facilities as appropriate for operations within their respective search and rescue regions (SRRs);
- (b) Make, and respond to, requests for operational assistance between the designated rescue co-ordination centres (RCCs) or rescue sub-centres (RSCs) of the Parties as capabilities allow;
- (c) Develop procedures and communications appropriate for co-ordination among facilities of both Parties responding to the same distress incident, and for co-ordination between the RCCs or RSCs of the Parties;
- (d) Normally apply the guidance of the International Aeronautical and Maritime SAR Manuals regarding SAR operational procedures and communications;
- (e) Work to establish agreed procedures, which balance concerns for sovereignty and for saving lives, regarding entry of various types of SAR facilities into the territory of the other Party, solely for a search or a rescue operation; and
- (f) Enter into other collaborative SAR efforts which may include:
 - mutual visits by SAR personnel of the Parties;
 - joint training or exercises;
 - co-operation in development of SAR procedures, techniques, equipment, or facilities;
 - exchange of pertinent SAR or communications information; and
 - establishment of one or more SAR committees to provide a means for ongoing co-operation in improving SAR effectiveness.

3. SEARCH AND RESCUE REGIONS

Establishment of SRRs is intended only to effect an understanding concerning where each Party accepts primary responsibility for co-ordinating or providing SAR services. SRRs of the Parties shall be separated by lines connecting points as follows: [appropriate co-ordinate points describing applicable lines]

4. TERMS OF AGREEMENT

Each Party will:

- (a) Keep information readily available on availability of any SAR facilities or other resources which may be needed for implementing this Agreement.
- (b) Keep each other fully and promptly informed of all SAR operations of mutual interest, or which may involve use of facilities of the other Party;
- (c) Authorize its RCC(s) to request assistance via the RCC(s) of the other Party, and to provide all pertinent information on the distress situation and the scope of assistance needed;
- (d) Authorize its RCC(s) to promptly respond to a request for assistance from an RCC of the other Party;
- (e) Authorize its RCC(s) to promptly arrange, or arrange in advance, with other national authorities for territorial entry of SAR facilities of the other Party (including overflight or landing of SAR aircraft, and similar accommodation of surface (land or water) SAR units) as circumstances dictate for fuelling, medical, or other appropriate and available operational support, or in response to a request to the RCC of the other Party for assistance of those facilities which would involve territorial entry;
- (f) Normally fund its own activities in relation to this Agreement unless otherwise arranged by the Parties in advance, and, in any event, will not allow a matter of reimbursement of cost to delay response to persons in distress.

5. GENERAL PROVISIONS

This Agreement:

shall enter into force . . . [provisions as appropriate].

may be amended . . . [provisions as appropriate]; and

may be terminated or superseded . . . [provisions as appropriate];

ATM/SAR/AIS SG/8
Report on Agenda Item 9

REPORT ON AGENDA ITEM 9: LATEST DEVELOPMENTS IN THE ATM FIELD

9.1 Performance Based Navigation (PBN)

9.1.1 Under this agenda item, the meeting recalled that in the revised version of the Second Amendment to the Global Air Navigation Plan, for CNS/ATM Systems, being renamed as the Global Air Navigation Plan, Global Plan Initiatives (GPIs) have been developed to support performance objectives. GPI-5 is related to Performance Based Navigation “RNAV and RNP (PBN)”. The implementation of the concept of PBN will lead to increased capacity and enhanced efficiency through reductions in separation minima, bringing benefits to aircraft operators that equip to meet performance requirements. PBN will also improve safety, particularly on approach through a reduction of Controlled Flight Into Terrain (CFIT).

9.1.2 The meeting noted that the ICAO required navigation performance (RNP) concept is being revised in light of industry demands for Performance Based Navigation (PBN) and that PBN encompasses both area navigation (RNAV) and Required Navigation Performance (RNP).

9.1.3 The meeting recalled that ALLPIRG/5 Meeting when addressing the issue of global harmonization of RNP/RNAV implementation noted that ICAO was in the process of reviewing the current RNP concept to meet the increasing demands of airspace planners and aircraft operators for performance-based navigation (PBN).

9.1.4 PBN is increasingly seen as the most practical solution for regulating the expanding domain of navigation systems. Under the traditional approach, each new technology is associated with a range of system-specific requirements for obstacle clearance, aircraft separation, operational aspects (e.g. arrival and approach procedures), aircrew operational training and training for air traffic controllers. This system-specific approach, however, imposes an unnecessary effort and expense on ICAO as well as on States, airlines and Air Navigation Service (ANS) providers.

9.1.5 PBN eliminates the need for redundant investment in developing criteria and in operational modifications and training. Rather than building an operation around a particular system, under performance-based navigation, the operation is defined according to the operational goals and the available systems are then evaluated to determine whether they are supportive. The advantage of this approach is that it enables harmonized and predictable flight paths which result in more efficient use of existing aircraft capabilities as well as improved safety, greater airspace capacity, better fuel efficiency, and the resolution of noise issues.

9.1.6 The meeting noted that the original RNP concept was developed to allow planners to increase airspace capacity by specifying airspace and aircraft operational requirements based on the existing capabilities of the aircraft fleet rather than relying on the normally lengthy process required for industry to comply with sensor-dependent specifications.

9.1.7 As aircraft systems evolved, it became apparent that the original ICAO provisions were not sufficient to meet all of industry’s demands, and consequently they were unable to prevent the development of partially divergent industry specifications.

9.1.8 While this approach meets requirements at a regional level, the advent of RNP variations also implied that the original concept designed primarily to prevent “proliferation” of

ATM/SAR/AIS SG/8
Report on Agenda Item 9

new technology and regional navigation requirements was in fact contributing to this problem. The lack of harmonization raised concerns among aircraft operators, which faced an increasing burden of complying with varying regulations in different parts of the world. Potential safety risks were identified as operators and flight crew attempted to comply with all of the pertinent regulations in an environment where the rules change from region to region, and even during a single flight.

Area of Application	Navigation Accuracy (NM)	Navigation specification (Current)	Navigation specification (New)	Requirement for performance monitoring and alerting
Oceanic/Remote	10	RNP 10	RNAV 10 (RNP 10 label)	no
	4	RNP 4	RNP 4	yes
En Route-Continental	5	B-RNAV RNP 5	RNAV 5	no
En Route - Continental and Terminal	2	USRNAV type A	RNAV 2	no
	2	-	RNP 2	yes
Terminal	1	US-RNAV type B and P-RNAV	RNAV 1	no
	1	-	RNP 1	Yes
Approach	0.3	RNP 0.3	RNP 0.3	yes
	0.3 - 1	RNP/SAAAR	RNP 0.3 – 0.1 (RNP/AR)	yes

Table 1

9.1.9 ICAO responded to this undesirable situation by forming a study group to focus on all related issues and to present recommendations to the Air Navigation Commission on how best to proceed.

9.1.10 The Required Navigation Performance and Special Operational Requirements Study Group (RNPSORSG), which met for the first time in April 2004, recently concluded that it is indeed feasible to develop a globally harmonized concept that meets current operational requirements while remaining flexible enough for future requirements. The group, consisting of participants from several ICAO member States that are front-runners in RNAV and RNP implementation as well as aircraft manufacturers, airlines and pilot associations, has also recognized the value of industry developments in the area of on-board performance monitoring and alerting requirements. Such technology is even critical in some cases, such as in the final approach phase, where exacting obstacle clearance requirements can only be met with on-board performance monitoring and alerting.

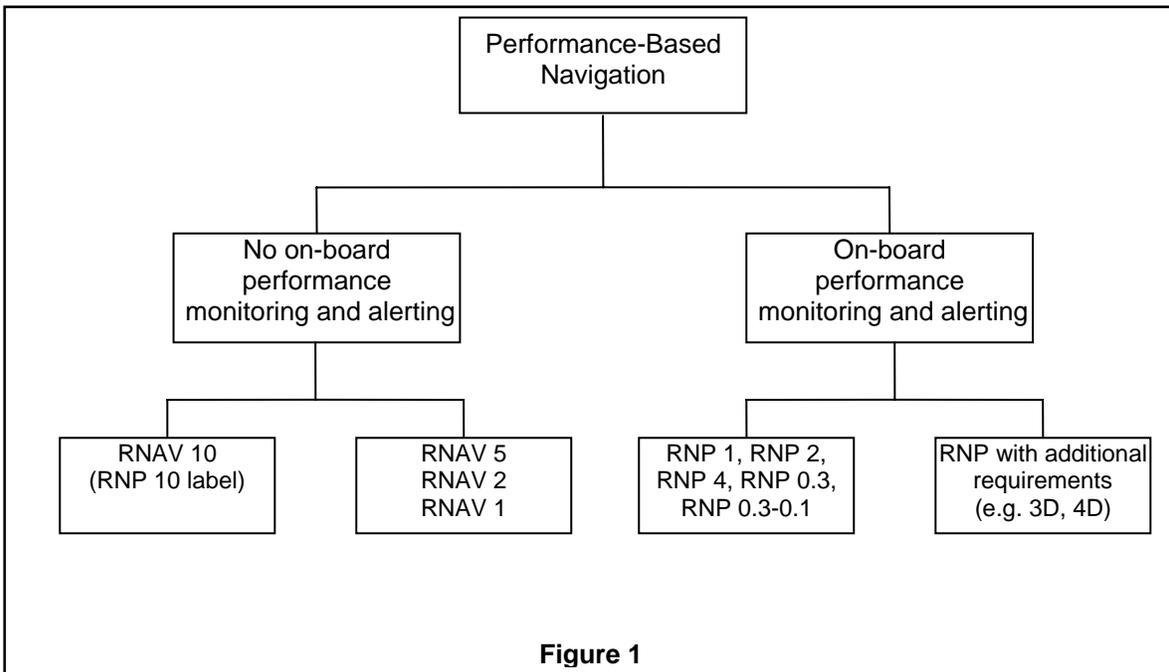
ATM/SAR/AIS SG/8
Report on Agenda Item 9

9.1.11 The revised RNP concept will likely harmonize the currently available RNAV and RNP-designated PBN applications, particularly in the terminal area, where a divergence in implementations has been noticed.

9.1.12 The revised concept clearly distinguishes between those operations that require on-board performance monitoring and alerting, and those that do not. The study group agreed that navigation specifications for operations that do not require on-board performance monitoring and alerting should be designated RNAV-X, while those operations requiring such capabilities would be known as RNP-X. The “X” in the designation identifies the lateral navigation accuracy in nautical miles (NM) that is required during at least 95 percent of the flight time.

9.1.13 As depicted in **Table 1**, thus far the group has identified nine different navigation specifications for which there is a current operational need. They are listed together with the applicable type of operation. Some of the specifications were already in existence, whereas others have been developed by RNPSORSG. For existing specifications, a conversion from the current designation to the designation based on the new scheme is provided in the table.

9.1.14 The PBN concept that allows for RNAV-X and RNP-X operations will also need to be flexible enough to accommodate potential requirements such as 4-D navigation. An overview of the PBN concept, showing how this all fits together, is illustrated in *Figure 1*.



9.1.15 Based on the above, the meeting agreed to the following Draft Decision:

DRAFT DECISION 8/15: MID REGION PBN STRATEGY

That, the RVSM /PBN Task Force:

- a) *follow up the developments related to Performance Based Navigation (PBN); and*
- b) *develop a MID Region strategy to implement the PBN concept.*

9.2 A380 wake turbulence aspects

9.2.1 The meeting recalled that further to enquiries received from a number of States on wake turbulence separation minima for flights being undertaken by the new Airbus A380 aircraft and in view of the size of the aircraft, an ad hoc group of experts under the auspices of the United States Federal Aviation Administration, the European Organisation for the Safety of Air Navigation (EUROCONTROL), the Joint Aviation Authorities (JAA) and the manufacturer was established to study the wake vortex aspects of this new aircraft.

9.2.2 The meeting was informed that the analyses and flight test data available to the group have raised concerns about horizontal and vertical wake turbulence spacing criteria for approach, landing, departure and en-route operations of the A380 relative to other aircraft. Accordingly, guidance material was issued in November 2005 and forwarded to all MID States through State Letter Ref.: AN 11/2-385 dated 10 November 2005. As the work of the ad hoc group was still in progress, and data collection, processing and analysis were still ongoing, the recommendations (guidance material) made at that time were necessarily conservative.

9.2.3 The meeting noted that the ad hoc group has now recommended more specific guidance, based on the completed flight test programme. Accordingly, revised guidance related to wake turbulence aspects of the Airbus A380-800 aircraft was issued and forwarded to States through State Letter Ref.: AN 6/2.1-340 dated 8 October 2006 attached at **Appendix 9A** to the report on Agenda Item 9. The meeting noted all guidance previously issued on the subject of Airbus A380 wake vortex aspects is superseded by the new guidance issued in October 2006.

9.2.4 The meeting noted also that it is anticipated that the ad hoc group will undertake additional studies with a view to further refinement of this guidance on the basis of operational experience. and a proposal for amendment of the *Procedures for Air Navigation Services — Air Traffic Management* (PANS-ATM, Doc 4444) will follow in due course.

9.2.5 The meeting noted the concern of Iraq about paragraph 5.8.1 of Doc 4444 where it is stated that *“the ATC unit concerned shall not be required to apply wake turbulence separation:*

- a) *for arriving VFR flights landing on the same runway as a preceding landing HEAVY or MEDIUM aircraft”; and*
- b) *between arriving IFR flights executing visual approach when the aircraft has reported the preceding aircraft in sight and has been instructed to follow and maintain own separation from that aircraft”.*

ATM/SAR/AIS SG/8
Report on Agenda Item 9

9.2.6 The meeting was informed that this has led to an incident in the terminal area of Baghdad international airport and invited ICAO to consider the amendment of this paragraph of the PANS-ATM.

9.2.7 Based on the above the meeting urged States to implement the revised guidance material on wake turbulence aspects of the Airbus A380-800 aircraft, pending the amendment of PANS-ATM (Doc 4444).

9.3 Language Proficiency

9.3.1 The meeting recalled that in 1998 the ICAO Assembly, taking note of several accidents and incidents where the language proficiency of pilots and air traffic controllers were causal or contributory factors, formulated Assembly Resolution A32-16 in which the ICAO Council was urged to direct the Air Navigation Commission to consider, with a high level of priority, the matter of English language proficiency and to complete the task of strengthening the relevant ICAO provisions.

9.3.2 It was also recalled that in March 2003, the ICAO Council adopted amendments to Annex 1 – *Personnel Licensing*, Annex 6 – *Operation of Aircraft*, Annex 10 – *Aeronautical Telecommunications*, Annex 11 – *Air Traffic Services*, and the *Procedures for Air Navigation Services – Air Traffic Management* (PANS-ATM, Doc 4444) related to the strengthened language proficiency requirements for pilots and air traffic controllers and require that flight crews and air traffic controllers involved in international operations have a minimum level of English language proficiency by 5 March 2008. These ICAO provisions represent a major initial step in forming a communicative competence in international aviation through common and standardized proficiency levels.

9.3.3 The meeting noted that ICAO Doc 9835 – ‘Manual on Implementation of ICAO Language Proficiency Requirements’ provides guidance material and valuable information on preparing training and testing programmes.

9.3.4 The meeting noted with appreciation that the ICAO MID Regional Office is planning to organize a Seminar on language proficiency in 2007.

9.3.5 With a view to expedite the process of implementation of the ICAO Language proficiency requirements, the meeting urged States to:

- ensure that all stakeholders (pilots, controllers, language teachers, regulators etc.) are familiar with the ICAO language proficiency requirements;
- adopt/incorporate the ICAO language proficiency requirements (Amendment 164 to Annex 1) into national legislation;
- establish a plan to coordinate administrative and training matters (testing, number of personnel to be trained, training centres, duration of training, etc.);
- develop/select test(s) to meet ICAO language proficiency requirements;

ATM/SAR/AIS SG/8
Report on Agenda Item 9

- assess current language proficiency level of controllers and pilots, according to the ICAO rating scale;
- develop language training packages designed to close the gap between current language proficiency level and ICAO Level 4;
- develop language training package to maintain language proficiency and a schedule of language refresher training;
- review recruitment and selection procedures and consider a minimum of at least ICAO level 3 in language proficiency before entry to professional training programmes; and
- present reports to ICAO on progress achieved in preparing for implementation of ICAO language proficiency requirements, on regular basis.

9.3.6 The meeting recalled that ICAO has developed and published standard phraseology which shall be used in all situations for which it has been specified (Annex 10, Volume 2, paragraph 5.1.1.1, refers) and recognized that the use of a standard phraseology is considered essential in preventing accidents and improving safety and efficiency.

9.3.7 The meeting was of view that the use of different languages in the same environment during international operations could interfere with communication by creating misunderstanding, confusion or mistakes and could result in ambiguities and hazards for aviation safety.

9.3.8 The meeting pointed out that in a number of States of the Middle East Region, Air Traffic Services are provided through the use of two languages: national language and English. It was recognized that the use of more than one language in the same environment can lead to a lack of situational awareness for flight crews who do not understand the other language used for radiotelephony in that airspace. Accordingly, the meeting agreed that the establishment of a single-language radiotelephony environment that would rely only on the English language, based on the new ICAO language proficiency requirements, would certainly improve the communication effectiveness and would therefore significantly contribute to the overall level of safety.

9.3.9 Based on the above, the meeting agreed to the following Draft Conclusions:

DRAFT CONCLUSION 8/16: ICAO LANGUAGE PROFICIENCY

That, with a view to expedite the process of implementation of the ICAO Language proficiency requirements, States are urged to:

- a) *ensure that all stakeholders (pilots, controllers, language teachers, regulators etc.) are familiar with the ICAO language proficiency requirements;*
- b) *adopt/incorporate the ICAO language proficiency requirements (Amendment 164 to Annex 1) into national legislation;*

ATM/SAR/AIS SG/8
Report on Agenda Item 9

- c) *establish a plan to coordinate administrative and training matters (testing, number of personnel to be trained, training centres, duration of training, etc.);*
- d) *develop/select test(s) to meet ICAO language proficiency requirements;*
- e) *assess current language proficiency level of controllers and pilots, according to the ICAO rating scale;*
- f) *develop language training packages designed to reduce the gap between current language proficiency level and ICAO Level 4;*
- g) *develop language training package to maintain language proficiency and a schedule of language refresher training;*
- h) *review recruitment and selection procedures and consider a minimum of at least ICAO level 3 in language proficiency before entry to professional training programmes; and*
- i) *present reports to ICAO on progress achieved in preparing for implementation of ICAO language proficiency requirements, on regular basis.*

**DRAFT CONCLUSION 8/17: *USE OF THE ENGLISH LANGUAGE AND STANDARD ICAO
PHRASEOLOGY***

That,

- a) *States are urged to ensure that their air traffic controllers and pilots use the standard ICAO phraseology in aeronautical communication; and*
- b) *with a view to improve situational awareness and prevent the occurrence of ATS incidents and accidents, States are invited to implement measures that require or encourage air traffic controllers and pilots to:*
 - i. *use as much as possible the English language in aeronautical communication; and*
 - ii. *use only the English language in aeronautical communication, in all situations where at least one of the pilots in the environment (sector) does not speak the national language.*

ATM/SAR/AIS SG/8
Appendix 9A to the Report on Agenda Item 9



International
Civil Aviation
Organization

Organisation
de l'aviation civile
internationale

Organización
de Aviación Civil
Internacional

Международная
организация
гражданской
авиации

منظمة الطيران
المدنى الدولى

国际民用
航空组织

Ref.: AN 6/2.1-340

8 October 2006

Subject: Wake turbulence aspects of Airbus A380-800 aircraft

Action Required: Note the guidance in the Attachment

Sir,

I wish to refer to guidance issued in November 2005 on the subject of Airbus A380 wake vortex aspects. You may recall that an ad hoc group of experts under the auspices of the United States Federal Aviation Administration, the European Organisation for the Safety of Air Navigation (Eurocontrol), the Joint Aviation Authorities and the manufacturer were studying the wake vortex aspects of this new aircraft. As their work was still in progress, and data collection, processing and analysis were still ongoing, the recommendations made at that time were necessarily conservative.

The ad hoc group has now recommended more specific guidance, based on the completed flight test programme. Accordingly, revised guidance related to wake turbulence aspects of the Airbus A380-800 aircraft is attached. **I strongly encourage you to implement this revised guidance as soon as possible.** All guidance previously issued on the subject of Airbus A380 wake vortex aspects is hereby superseded.

It is anticipated that the group will undertake additional studies with a view to further refinement of this guidance on the basis of operational experience. A review of the current wake turbulence categorization scheme by the ad hoc group is also foreseen. A proposal for amendment of the *Procedures for Air Navigation Services — Air Traffic Management* (PANS-ATM, Doc 4444) will follow in due course and, in accordance with the established procedure, States and international organizations will be consulted.

Accept, Sir, the assurances of my highest consideration.

Mohamed R. M. Khonji
ICAO Regional Director, Cairo

Enclosures:

A — Guidance on A380-800 Wake Vortex Aspects

ATTACHMENT to SL Ref. AN 6/2.1-340

GUIDANCE ON A380-800 WAKE VORTEX ASPECTS

1. INTRODUCTION

This guidance is based on the current outcome of work by an ad hoc group of experts under the auspices of the United States Federal Aviation Administration, the European Organisation for the Safety of Air Navigation (Eurocontrol), the Joint Aviation Authorities and the manufacturer. Work is continuing, and it is anticipated that the group will undertake additional studies with a view to further refinement of this guidance on the basis of operational experience. A review by the ad hoc group of the current wake turbulence categorization scheme is also foreseen.

The Airbus A380-800, with a maximum take-off mass in the order of 560 000 kg, will be the largest passenger aircraft ever to enter into revenue service. The aircraft is in the HEAVY wake turbulence category and the *Procedures for Air Navigation Services — Air Traffic Management* (PANS-ATM, Doc 4444) apply. However, as vortices generated by the A380-800 are more substantial than for other aircraft in the HEAVY wake turbulence category, this guidance recommends an increase in relation to the wake turbulence separation minima published in the PANS-ATM. This is intended to ensure that aircraft operating near an A380-800 do not encounter wake vortices of a greater magnitude than are generated by other aircraft in the HEAVY wake turbulence category. States are strongly encouraged to implement this guidance pending an amendment to the PANS-ATM.

Note. — For ease of reference, related PANS-ATM provisions are indicated below.

2. INDICATION OF AIRCRAFT TYPE

(PANS-ATM 4.9.2 and Appendix 2)

2.1 For A380-800 aircraft the letter “J” should be entered into the space allocated to wake turbulence under Item 9 of the ICAO flight plan.

2.2 For A380-800 aircraft the expression “SUPER” should be included immediately after the aircraft call sign in the initial radiotelephony contact between such aircraft and ATS units.

3. NON-RADAR WAKE TURBULENCE LONGITUDINAL SEPARATION MINIMA

(PANS-ATM 5.8.2, 5.8.3, 5.8.4 and 5.8.5)

3.1 Arriving aircraft

The following non-radar separation minima should be applied to aircraft landing behind an A380-800 aircraft:

- a) MEDIUM aircraft behind an A380-800 aircraft — 3 minutes;
- b) LIGHT aircraft behind an A380-800 aircraft — 4 minutes.

3.2 Departing aircraft

3.2.1 A minimum separation of 3 minutes should be applied for a LIGHT or MEDIUM aircraft and 2 minutes for a non-A380-800 HEAVY aircraft taking off behind an A380-800 aircraft when the aircraft are using:

- a) the same runway;
- b) parallel runways separated by less than 760 m (2 500 ft);
- c) crossing runways if the projected flight path of the second aircraft will cross the projected flight path of the first aircraft at the same altitude or less than 300 m (1 000 ft) below;
- d) parallel runways separated by 760 m (2 500 ft) or more, if the projected flight path of the second aircraft will cross the projected flight path of the first aircraft at the same altitude or less than 300 m (1 000 ft) below.

3.2.2 A separation minimum of 4 minutes should be applied for a LIGHT or MEDIUM aircraft when taking off behind an A380-800 aircraft from:

- a) an intermediate part of the same runway; or
- b) an intermediate part of a parallel runway separated by less than 760 m (2 500 ft).

3.3 Displaced landing threshold

A separation minimum of 3 minutes should be applied between a LIGHT or MEDIUM aircraft and an A380-800 aircraft when operating on a runway with a displaced landing threshold when:

- a) a departing LIGHT or MEDIUM aircraft follows an A380-800 aircraft arrival; or
- b) an arriving LIGHT or MEDIUM aircraft follows an A380-800 aircraft departure if the projected flight paths are expected to cross.

3.4 Opposite direction

A separation minimum of 3 minutes should be applied between a LIGHT or MEDIUM aircraft and an A380-800 aircraft when the A380-800 aircraft is making a low or missed approach and the LIGHT or MEDIUM aircraft is:

- a) utilizing an opposite-direction runway for take-off; or
- b) landing on the same runway in the opposite direction, or on a parallel opposite-direction runway separated by less than 760 m (2 500 ft).

4. RADAR WAKE TURBULENCE SEPARATION MINIMA
(PANS-ATM 8.7.4.4 and 8.7.4.4.1)

4.1 The following wake turbulence radar separation minima should be applied to aircraft in the approach and departure phases of flight in the circumstances given in 4.2.

<i>Preceding aircraft</i>	<i>Succeeding aircraft</i>	<i>Wake turbulence radar separation minima</i>
A380-800	A380-800	7.4 km (4.0 NM)
A380-800	Non-A380-800 HEAVY	11.1 km (6.0 NM)
A380-800	MEDIUM	14.8 km (8.0 NM)
A380-800	LIGHT	18.5 km (10.0 NM)

Note. — Although no wake constraint for the A380-800 as a succeeding aircraft was recommended by the ad hoc group, the guidance above indicates a wake turbulence separation minimum of 7.4 km (4.0 NM) between two A380-800 aircraft, as this is the minimum between two HEAVY aircraft prescribed by the PANS-ATM. The recommendation of the ad hoc group will be taken into account during the development of a proposal for amendment to the PANS-ATM.

4.2 The minima set out in 4.1 should be applied when:

- a) an aircraft is operating directly behind an A380-800 aircraft at the same altitude or less than 300 m (1 000 ft) below; or
- b) both aircraft are using the same runway, or parallel runways separated by less than 760 m; or
- c) an aircraft is crossing behind an A380-800 aircraft, at the same altitude or less than 300 m (1 000 ft) below.

ATM/SAR/AIS SG/8
Report on Agenda Item 10

REPORT ON AGENDA ITEM 10: AIS/MAP ISSUES**10.1 Review of the report of the AIS/MAP TF/3 meeting**

10.1.1 Under this agenda item the Sub-Group reviewed the report of the Third meeting of the AIS/MAP Task Force, which was held in Cairo, 3 - 5 April 2006.

10.1.2 The meeting was of view that the implementation of quality system within AIS and particularly the signature of Service Level Agreements (SLA) between AIS and the data originators will resolve to a large extent the lack of coordination between AIS and the technical departments providing raw data, which represents the main cause for non implementation of the AIRAC system by a number of States.

10.1.3 The meeting recognized that late receipt of aeronautical information continues to be a problem for the aviation community in the MID Region. The problems will continue to expand unless all Civil Aviation Authorities place renewed emphasis to enhance the resources and capabilities of AIS organizations so that the AIS responsibilities can be efficiently accomplished.

10.1.4 In this regard, the meeting recalled that the AIS/MAP TF/2 meeting was of view that advance posting of AIRAC information on the web could be a very good tool allowing users to start working on the updates of their systems (off-line), their charts, etc, before the official hardcopies of the amendment/supplement are received.

10.1.5 With a view to enhance the communication between the AIS Community in the MID Region and taking into consideration the ICAO guidelines on the use of the public internet for aeronautical applications (Doc 9855), the meeting strongly encouraged the use of electronic mail and urged States, who have not yet done so, to publish in their AIP the AIS email address.

10.1.6 Based on the above, the meeting agreed to the following Draft Conclusion:

DRAFT CONCLUSION 8/18: USE OF EMAIL TO ENHANCE COMMUNICATION BETWEEN THE AIS COMMUNITY IN THE MID REGION

That, with a view to enhance the communication between the AIS Community in the MID Region:

- a) States, who have not yet done so, publish in their AIP (para. GEN 3.1.1) their AIS email address, as soon as possible; and*
- b) ICAO consider the amendment of Annex 15 Appendix 1, para. GEN 3.1.1 to add such requirement.*

10.1.7 Concern was also raised regarding the qualification and training of the AIS/MAP personnel in the MID Region particularly the AIS Briefing Offices staff and regarding the status of AIS in general within MID States' Civil Aviation Authorities.

10.1.8 With regard to WGS-84, the meeting pointed out that although the implementation of WGS-84 should have been completed since 1998, some MID States have still not fully completed the implementation of the system. The Status of implementation of WGS-84 in the MID Region can be summarized as follows:

ATM/SAR/AIS SG/8
Report on Agenda Item 10

- a) five (5) States have fully implemented WGS-84 including the geoid undulation;
- b) three (3) States haven't yet implemented WGS-84; and
- c) the majority of MID States haven't yet implemented the geoid undulation.

10.1.9 Recognising the operational need for AIS information in electronic format, the meeting noted that many States are in the process of designing and implementing, individually or on a regional basis, reference aeronautical information databases. The undertaking by States of such developments in isolation could be an unnecessary duplication of effort, which is likely to lead into incompatibility problems. While some States have already automated their AIS, others are still in the process of doing so, or are in the planning stage. Consequently, it is highly desirable that all AIS systems be automated along the same or similar lines in order to ensure compatibility.

10.1.10 In this regard, the question concerning the legal status of electronic AIP (eAIP) and ICAO position on this matter was repeatedly raised. The development of necessary specifications and clear provisions related to the eAIP content, structure, presentation and format (PDF or HTML format, etc) is becoming urgent.

10.1.11 Taking into consideration that the development of a global standard by ICAO might take time, the meeting invited States, who have not yet done so, to publish their Integrated Aeronautical Information Package in PDF/HTML format on a CD-ROM without discontinuing the provision of the information in hardcopy as stated in Doc 8126 para. 2.6.12 "*States introducing provision of aeronautical information in electronic form must continue to provide it in paper copy form as well*".

10.1.12 With regard to the status of implementation of AIS automation in the MID Region, the meeting noted with concern that many AISs in the MID Region are still using manual or semi-automated processes and urged States to put the necessary resources in AIS with a view to introduce AIS automation. Accordingly and in order to overcome the deficiencies related to aeronautical information/data still processed manually, the meeting agreed that AIS automation should be implemented in an evolutionary manner taking into account experiences and implementation strategies/techniques being adopted in adjacent States and Regions.

10.1.13 Based on the above, the meeting reiterated the need to comply with MIDANPIRG/9 Conclusions 9/26, 9/27 and 9/28 relative to AIS automation and endorsed the following Draft Conclusions emanating from the AIS/MAP TF/3 meeting:

DRAFT CONCLUSION 8/19: ADVANCE POSTING OF THE AIRAC INFORMATION ON THE WEB

That, with a view to improve the timeliness of aeronautical information, MID States are invited to arrange for the advance posting of AIRAC information on the web, before dissemination of the official hardcopies of the AIP Amendment/ Supplement.

DRAFT CONCLUSION 8/20: ELECTRONIC AIP (eAIP)

That,

- a) *pending the development of Global eAIP provisions, MID States, who have not yet done so, publish their Integrated Aeronautical Information Package in PDF/HTML format on a CD-ROM, without discontinuing the provision of the information in hardcopy; and*

ATM/SAR/AIS SG/8
Report on Agenda Item 10

- b) *in order to prevent proliferation of eAIP formats, ICAO consider developing necessary specifications and clear provisions related to the eAIP content, structure, presentation and format.*

10.1.14 The meeting recognized that, while the importance and need for the provision of high quality aeronautical information is gaining momentum, the implementation of quality system appears to be a specific domain with low degree of implementation among MID States.

10.1.15 The meeting recalled that MIDANPIRG/9 developed Conclusion 9/29 related to a survey on the implementation of quality system within MID States' AISs.

10.1.16 Based on the results of the survey carried out in the MID Region and the outcome of the 5 missions to States conducted within the framework of a SIP on implementation of QMS within MID States' AISs, the meeting noted with concern that only three States in the MID Region have implemented a Quality Management System: i.e. Bahrain, Egypt and UAE, among them only two States have been certified ISO 9001:2000 (Bahrain and UAE). The majority of MID States have not made satisfactory progress in the implementation of quality system.

10.1.17 The meeting was appraised of the outcome of the SIP on implementation of QMS within MID States' AISs. In this regard, the lack of awareness about quality and the need/requirements for the implementation of a QMS for AIS/MAP Services was noted. The need for the harmonization of the AIS/MAP training programmes at regional/global level was also highlighted and guidelines from ICAO have been requested. In this respect, the meeting was informed that the English version of Doc 7192 Part E-3 "AERONAUTICAL INFORMATION SERVICES PERSONNEL TRAINING MANUAL PRELIMINARY EDITION – 2005" has been posted on the ICAO NET website at: <http://www.icao.int/cgi/icaonet.pl>.

10.1.18 Taking into consideration the findings of the SIP mentioned here-above and with a view to expedite the process of implementation of QMS in MID States' AISs, the meeting reiterated the need to comply with MIDANPIRG/8 Conclusion 8/32 "PROPER STATUS OF AIS" and urged States, who have not yet done so, to implement the methodology at **Appendix 10A** to the report on Agenda Item 10. Accordingly, the meeting agreed to the following Draft Conclusion and Decision:

DRAFT CONCLUSION 8/21: **METHODOLOGY FOR THE IMPLEMENTATION OF QMS WITHIN MID STATES' AISs**

*That, States, who have not yet implemented a QMS within their AIS, are urged to apply the methodology at **Appendix 10A** to the report on Agenda Item 10.*

DRAFT DECISION 8/22: **ESTABLISHMENT OF A QMS IMPLEMENTATION ACTION GROUP**

*That, the QMS implementation Action Group is established with Terms of Reference as at **Appendix 10B** to the report on Agenda Item 10.*

10.1.19 Recognizing the importance of AIS as an essential foundation block of the future ATM operational concept and the safety implication of the non-provision of timely and high quality aeronautical information, and taking into consideration Annex 15 requirements for the evaluation and maintenance of the competence/skill of the AIS staff, the meeting was of view that AIS/MAP personnel has to be licensed. Accordingly, the meeting developed the following Draft Conclusion:

DRAFT CONCLUSION 8/23: LICENSING OF THE AIS/MAP PERSONNEL

That, recognizing the importance of AIS and the safety implication of the non-provision of timely and high quality aeronautical information, and taking into consideration Annex 15 requirements for the evaluation and maintenance of the competence/skill of the AIS staff, ICAO consider the introduction of the licensing of the AIS/MAP personnel as a Recommended Practice in Annex 1.

10.1.20 The meeting was appraised of the outcome of the AIS/MAP TF/3 related to the new requirements related to the provision of electronic Terrain and Obstacle Data (eTOD) introduced by Amendment 33 to Annex 15 with applicability dates:

- a) 20 November 2008 for those parts of the amendment related to the availability of terrain and obstacle data in accordance with Area 1 specifications and for the availability of terrain data in accordance with Area 4 specifications; and
- b) 18 November 2010 for those parts of the amendment related to the availability of terrain and obstacle data in accordance with Area 2 and Area 3 specifications.

10.1.21 The meeting noted that some difficulties related to the implementation of Amendment 33 requirements (new Chapter 10 of Annex 15) within the specified time-schedule have been raised by some States. With a view to expedite the process of implementation of eTOD requirements, the identification of recommended data formats, review of cross-boarder issues, clarification of terrain and obstacle data integrity requirements, initial assessment of liability and cost recovery issues, etc, are required. In addition, the need for harmonization and coordination of the implementation activities on a regional basis was required. In this regard, the meeting noted with appreciation that the ICAO MID Office is organising a four day-Seminar in Cairo from 11 to 14 December 2006 dealing with training matters pertaining to the provision of eTOD.

10.1.22 The meeting noted with concern that time for implementation of Amendment 33 to Annex 15 is becoming very critical. With a view to expedite the process of implementation of the Annex 15 new provisions, the meeting agreed to the following draft Conclusions:

DRAFT CONCLUSION 8/24: ROADMAP FOR THE IMPLEMENTATION OF eTOD REQUIREMENTS

That,

- a) *States develop their plans related to the implementation of eTOD requirements; and*
- b) *communicate their implementation roadmap to the ICAO MID Regional Office, prior to **31 December 2006**, specifying clearly if they would encounter any difficulty to comply with the dates of applicability.*

DRAFT CONCLUSION 8/25: COLLABORATIVE APPROACH FOR THE IMPLEMENTATION OF eTOD REQUIREMENTS

That, with a view to expedite the implementation of eTOD requirements, MID States:

- a) *develop a high level policy for the management of a national eTOD programme;*

ATM/SAR/AIS SG/8
Report on Agenda Item 10

- b) *define clearly the responsibilities and roles of the different Administrations within and outside the Civil Aviation Authority in the implementation process (AIS, Aerodromes, Military, National Geographic and Topographic Administrations/Agencies, etc); and*
- c) *secure the necessary resources for the eTOD programme.*

DRAFT DECISION 8/26: ESTABLISHMENT OF AN eTOD WORKING GROUP

*That, for harmonization and coordination of eTOD implementation activities on a regional basis, the electronic Terrain and Obstacle Data Working Group is established with Terms of Reference as at **Appendix 10C** to the report on Agenda Item 10.*

10.1.23 Taking into consideration the new ICAO provisions related to the AIS/MAP field, introduced particularly by Amendment 33 to Annex 15, the meeting reviewed and updated the MID Region AIS/MAP Timelines as at **Appendix 10D** to the report on Agenda Item 10 and agreed to the following Draft Conclusion:

DRAFT CONCLUSION 8/27: AIS/MAP TIMELINES FOR THE MID REGION

*That, the AIS/MAP Timelines for the MID Region be updated as at **Appendix 10D** to the report on Agenda Item 10.*

10.1.24 The meeting proceeded also to the review of the Terms of Reference and Work Programme of the AIS/MAP Task Force and agreed consequently to the following Draft Decision:

DRAFT DECISION 8/28: REVISED TERMS OF REFERENCE AND WORK PROGRAMME OF THE AIS/MAP TASK FORCE

*That, the AIS/MAP Task Force's Terms of Reference and Work Programme be updated as at **Appendix 10E** to the report on Agenda Item 10.*

10.1.25 The meeting noted with appreciation the presentation made by EUROCONTROL on Aeronautical Information Management (AIM). It was noted in this regard that AIM is the successor to Aeronautical Information Services (AIS) and envisages transition from a product-based to a digital information centric service. AIM is the term applied to the globally interoperable provision of aeronautical data of the required quality, covering the needs of the present and future ATM system and all phases of flight in a data oriented, holistic way. AIM is a data management concept incorporating aeronautical information in the widest sense of the expression, covering all data related to the aeronautical environment. In this respect, the meeting noted that the scope of AIM incorporates, at high level, the structure, delivery, and the critical nature of all ATM relevant information such as: aeronautical information, meteorological data, flight planning, ATFM, planned and real-time status of ATM and related systems, and airspace and sector configurations.

10.1.26 The meeting was appraised also of EUROCONTROL's activities towards the implementation of AIM.

10.2 Global AIS Congress

10.2.1 The meeting was appraised of the outcome of the outcome of the Global AIS Congress held in Madrid, Spain from 27 to 29 June 2006.

ATM/SAR/AIS SG/8
Report on Agenda Item 10

10.2.2 The meeting recalled that the Global AIS Congress considered the essential role of AIS in the evolving world of ATM. It identified the key drivers for change, looked at the many complex issues associated with evolution and explored what must be done to ensure that aeronautical information of the right scope and quality is made available. The Congress began to define a future high-level view as to the shape, nature and content of a strategy for the evolution of AIS and in the provision and management of aeronautical information in general. It reviewed technologies that will facilitate change in a practical and affordable way.

10.2.3 The meeting agreed with the Congress that there are AIS initiatives going on in many regions, but without effective global coordination. Each region was operating without understanding of the other's work.

10.2.4 In order to prevent diverging developments in the future and realising the safety critical nature of aeronautical information, it is considered essential that ICAO takes the lead at the global level with regard to the transition from AIS to AIM as called for by AN-Conf/11.

10.2.5 The meeting noted that the Congress outlined a roadmap for the evolution of the provision of aeronautical information to assist ICAO to facilitate global change and was informed that the Congress Summary Report was sent officially to ICAO Headquarters end of August 2006 and presented to the ICAO Air Navigation Commission on 3 November 2006. The Conclusions and Recommendations of the Congress are at **Appendix 10F** to the report on Agenda Item 10.

10.2.6 The meeting noted that ICAO HQs, based on the briefing made by EUROCONTROL related to the Global AIS Congress outcome, recognized that the Congress addressed important issues that have to be integrated into ICAO's Air Navigation Integrated Programme. ICAO also agreed to take the lead to address all the Recommendations of the Global AIS Congress. However, it was recognized that this will require support from States and international organizations. In this regard, the meeting noted with appreciation that EUROCONTROL has agreed to provide the required support and that a meeting between ICAO and EUROCONTROL will be held in Montreal in February 2007 to discuss the work that has to be done and to develop a project plan. It was also agreed that the Consortium would present a paper at the next ICAO General Assembly highlighting the Institutional issues that have to be addressed with a view to update the Assembly on the issues and the difficulties that have to be overcome and eventually propose solutions and a possible Resolution.

10.2.7 Based on the above, the meeting developed the following Draft Conclusion:

DRAFT CONCLUSION 8/29: FOLLOW-UP ON THE OUTCOME OF THE GLOBAL AIS CONGRESS

That, ICAO, with the support of States and international organizations, take necessary follow-up action, as soon as possible, to implement the Recommendations of the Global AIS Congress.

ATM/SAR/AIS SG/8
Appendix 10A to the Report on Agenda Item 10

METHODOLOGY FOR THE IMPLEMENTATION OF QMS WITHIN MID STATES' AISs

With a view to expedite and foster the implementation of Quality Management Systems (QMS) within MID States AISs, the following methodology is adopted. States are urged to:

- a) Set up a project structure relative to the implementation of QMS (project team, managing Committee, etc) and appoint a quality manager.
- b) Appoint quality representatives from various areas of activity.
- c) Define the roles and responsibilities of the Project Team Members.
- d) Secure a financial commitment for the project.
- e) Increase the workforce awareness about quality management and the importance of customer satisfaction.
- f) Allocate necessary resources in order to implement, maintain and improve the quality system taking into consideration the customer requirements.
- g) Select a consultant to guide the process, assist in the correct interpretation of ISO 9000 requirements and ensure that the internal Team is kept on track for compliance.
- h) Determine the quality system framework/scope and decide if there is any permissible exclusion.
- i) Undertake quality system and English language proficiency training.
- j) Train internal auditors with a view to carry out internal audits of the system and participate in the process of development, implementation and continual improvement of the QMS.
- k) Motivate the AIS personnel, encourage the teamwork and get everybody involved in writing down how he carries out his parts of the AIS/MAP activities.
- l) Establish a mechanism/procedure to ensure that the competence/skill of the AIS staff is regularly evaluated and meet the requirements. A licensing system could be envisaged for this purpose.
- m) Establish a continuous dialogue with the end users and identify their requirements with a view to provide them with value-added, defect-free and high quality products that are timely and competitively priced.

ATM/SAR/AIS SG/8
Appendix 10B to the Report on Agenda Item 10

**MID REGION QUALITY MANAGEMENT SYSTEM IMPLEMENTATION ACTION GROUP
(QMS AG)**

A) TERMS OF REFERENCE

With a view to support the implementation of Quality Management System in compliance with the ISO 9000 requirements within MID States' AISs, the MID Region QMS Action Group shall:

- 1) identify the difficulties that MID States could have to comply with Annex 15 requirements pertaining to quality system;
- 2) develop a common understanding of ISO 9000 requirements and develop associated guidelines as required;
- 3) foster the implementation of the methodology adopted in the MID Region for the implementation of QMS within Aeronautical Information Services;
- 4) guide the development and support the roll-out of an awareness campaign for QMS implementation within MID States; and
- 5) monitor the implementation of QMS within MID States' AISs.

B) COMPOSITION

The QMS AG will be composed of the following Experts:

- Mr. Abdul Nasser A. Al-Emadi from Bahrain (*Rapporteur of the Group*)
- Mr. Mahfouz Mostafa Ahmed from Egypt
- Ms. Hanan Akram Qabartai from Jordan
- Mr. Ghorman Ashahre from Saudi Arabia
- Mr. Hussein Al –Sureihi from Yemen.

C) WORKING ARRANGEMENTS

The QMS AG shall report to the AIS/MAP Task Force.

The work of the QMS AG shall be carried out mainly through exchange of correspondence (email, facsimile, Tel, etc) between its Members.

ATM/SAR/AIS SG/8
Appendix 10C to the Report on Agenda Item 10

**MID REGION ELECTRONIC TERRAIN AND OBSTACLE DATA WORKING GROUP
(eTOD WG)**

A) TERMS OF REFERENCE

With a view to harmonize, coordinate and support the eTOD implementation activities on a regional basis, the MID Region eTOD Working Group shall:

- 1) analyse the eTOD requirements and develop a common understanding of these requirements (clarify the needs in terms of data format, temporality, cross-border harmonisation and develop associated guidelines as required);
- 2) recommend the way forward the eTOD timely implementation;
- 3) develop and maintain a MID Region eTOD implementation strategy;
- 4) guide the development and support the roll-out of an awareness campaign for eTOD implementation within MID States;
- 5) carry out a theoretical study of candidates techniques for electronic Terrain and Obstacle Data acquisition including a cost benefit analysis;
- 6) develop a high level MID Region business case for eTOD implementation;
- 7) carry out a study case for a representative aerodrome from the MID Region;
- 8) assist States in the development of mandate/policy pertaining to the implementation of eTOD requirements;
- 9) develop an action plan for the implementation of eTOD requirements in the MID Region;
- 10) monitor the cost-conscious and timely implementation of eTOD requirements in the MID Region;
- 11) monitor and review latest developments pertaining to eTOD; and
- 12) develop its work programme within the scope of its Terms of Reference.

B) COMPOSITION

The eTOD Working Group will be composed of Experts nominated by Middle East Provider States from different technical areas within and outside the Civil Aviation Authority (AIS/MAP, Aerodrome, Military, Procedure Designers, Navigators, surveyors, National Geographic Administration/Agency, etc).

ICAO, IATA and IFALPA are Observers.

Other representatives from industry and user Organisations having a vested interest in Aeronautical Information Services and eTOD in particular (NGA, NASA, ESRI, etc) could participate in the work of this Working Group.

C) WORKING ARRANGEMENTS

The eTOD Working Group shall report to the AIS/MAP Task Force.

The work of the eTOD Working Group shall be carried out mainly through exchange of correspondence (email, facsimile, Tel, etc) between its Members. The Working Group shall meet as required and at least once a year. The convening of the Working Group meetings should be initiated by the Rapporteur in coordination with the Members of the Group and ICAO MID Office.

Note: The hosting State/Rapporteur will be designated further to the meeting after coordination between the ICAO MID Regional Office and all MID States.

Middle East Region
AIS/MAP IMPLEMENTATION PLAN
Updated timelines

TIMELINES:



Global



Regional



National

Middle East — Aeronautical Information Services Implementation																		
		1994	95	96	97	98	99	2000	01	02	03	04	05	06	07	08	09	2010
Global	Provision of eTOD for Area 1 and Area 4																	
MID Region																		
States	Afghanistan																	
	Bahrain																	
	Egypt																	
	Iran, Islamic Rep. of																	
	Iraq																	
	Israel																	
	Jordan																	
	Kuwait																	
	Lebanon																	
	Oman																	
	Qatar																	
	Saudi Arabia																	
	Syrian Arab Republic																	
	United Arab Emirates																	
	Yemen																	
Global	Provision of eTOD for Area 2 and Area 3																	
MID Region																		
States	Afghanistan																	
	Bahrain																	
	Egypt																	
	Iran, Islamic Rep. of																	
	Iraq																	
	Israel																	
	Jordan																	
	Kuwait																	
	Lebanon																	
	Oman																	
	Qatar																	
	Saudi Arabia																	
	Syrian Arab Republic																	
	United Arab Emirates																	
	Yemen																	

**MIDANPIRG
AERONAUTICAL INFORMATION SERVICES AND AERONAUTICAL CHARTS
TASK FORCE (AIS/MAP/TF)**

1. TERMS OF REFERENCE

The AIS/MAP Task Force shall:

- 1) examine the Status of implementation of the ICAO requirements in the field of AIS/MAP;
- 2) identify and review those specific deficiencies related to AIS/MAP and recommend action to be taken to eliminate them;
- 3) prepare amendments to relevant MID Basic ANP and FASID, as appropriate;
- 4) assist States to implement a quality system for aeronautical information in an expeditious manner;
- 5) monitor and review latest developments in the AIS/MAP field; and
- 6) foster the integrated improvement of aeronautical information services through proper training and qualification of the personnel performing technical duties in this aeronautical activity.

The AIS/MAP Task Force shall report to the ATM/SAR/AIS Sub-Group at each Sub-Group meeting.

2. WORK PROGRAMME

Ref	Tasks	Priority	Target Completion Date
1	Identify reasons that hinder States from implementation and adherence to the AIRAC System and suggest ways and means, which would facilitate adherence to the AIRAC System.	A	(1)
2	Analyze the status of implementation of WGS-84 in the MID Region and recommend measures to be taken to improve the situation.	A	(1)
3	Review the status of implementation of ICAO requirements pertaining to the Integrated Aeronautical Information Package and aeronautical charts in the MID Region.	A	(1)
4	Foster the standardized production of aeronautical charts in the MID Region, identifying the obstacles that some States could have in adjusting to the specifications of ICAO Annex 4 and recommend possible course of action to be taken by those States in order to comply with the requirements.	A	2007
5	Foster the implementation of Quality System within the Aeronautical Information Services in the MID Region, identifying the difficulties that States could have to comply with the specifications of ICAO Annex 15.	A	2007
6	Recommend possible course of action to be taken by each State in order to comply with ICAO requirements pertaining to Quality system.	A	2007
7	Develop a Quality assurance/management Plan for the MID Region to orient/assist States in the implementation of Quality Management System in accordance with ISO 9001-2000.	B	2007
8	Monitor and review technical and operating developments in the area of automation and AIS databases.	A	(1)
9	Develop a cohesive Air Navigation Plan for AIS Automation in the MID Region taking into consideration the outcome of the 11 th Air Navigation Conference.	B	2008
10	Carry out studies for the harmonization and automated processing of AIS, MET and FPL products in the MID Region;	A	2008
11	Prepare amendments to relevant MID Basic ANP and FASID, as appropriate.	A	(1)
12	Highlight the importance of giving AIS its proper status in the Civil Aviation Administrations.	A	(1)
13	Identify the AIS/MAP training resources available in the MID Region.	B	2008
14	Propose an AIS/MAP training action plan for the MID Region	B	2008
15	Address the issue of AIS/MAP personnel licensing and recommend action, as appropriate	B	2007
16	Harmonize, coordinate and support the eTOD implementation activities on a regional basis	A	2008

(1) Continuous Task

3. PRIORITIES

- A High priority tasks, on which work should be speeded up.
- B Medium priority tasks, on which work should begin as soon as possible, but without detriment to priority A tasks.
- C Tasks of lesser priority, on which work should begin as time and resources allow, but without detriment to priority A and B tasks.

4. COMPOSITION

MIDANPIRG Provider States + IATA + IFALPA

**GLOBAL AIS CONGRESS AND EXHIBITION
MADRID, SPAIN, 27-29 JUNE 2006**

CONCLUSIONS & RECOMMENDATIONS

CONCLUSIONS

1. The Global AIS Congress agreed that ATM is dependant on the availability of timely high quality aeronautical information and that the nature and scope of such information was quickly evolved from the narrow requirements instantiated in ICAO Annex 15. In consequence, the Global AIS Congress agreed that change was needed and these needs were driven by, amongst other factors:

- a) The increased reliance on computerisation both in the air and on the ground (ground-based ATM systems, avionics, flight dispatch solutions, procedure design tools, etc) and that dependence on available, timely, high integrity aeronautical information.
- b) That the provision of aeronautical information of the integrity required by ATM could no longer be reliant on paper-based and mainly manual processes and that AIS must quickly migrate to electronic media and automated processing to provide the total quality environment to satisfy its customers needs;
- c) Emerging technology such as data exchange models and communications protocols that allowed the safe and timely exchange of digital and interoperable information in a secure way;
- d) The growing user requirements for more broad-based provision of aeronautical information the scope of which is currently for broader than that encompassed in Annex 15 required to support present operations and emerging concepts and applications such as Collaborative Decision Making (CDM) and system-wide Information Management.

2. The Global AIS Congress supported the recommendation of the ICAO 11th Air Navigation Conference (Autumn 2003) specifically recommendation 1/8 – Global aeronautical information management and data exchange model, that ICAO:

- a) When developing ATM requirements, define corresponding requirements for safe and efficient global aeronautical information management that would support a digital, real-time, accredited and secure aeronautical information environment.
- b) Urgently adopt a common aeronautical information exchange model, taking into account operational systems or concepts of data interchange, including specifically, AICM/AIXM, and their mutual interoperability; and
- c) Develop, as a matter of urgency, new specifications for Annexes 4 and 15 that would govern provision, electronic storage, on-line access to and maintenance of aeronautical information and charts.

3. The Global AIS Congress in recognizing the global nature of aeronautical information provision and its exchange called for an active, coordinated global approach to the evolution of AIS in accordance with the recommendations of the 11th Air Navigation Conference and agreed that this should include all stakeholders of AIS. The objective should be to develop and agree a practical, business oriented and validated, and affordable roadmap for change on which States and Industry (in the broadest sense) could build investment, staffing and training plans to support change. It was noted that the Global AIS Congress strongly identified the need for a Global Forum and asked ICAO working with international organizations and States give consideration as to how such a forum could be established.

4. The Global AIS Congress agreed that salient to change was the adoption by ICAO of a common aeronautical information model in accordance with the recommendation 1/8/b of the 11th Air Navigation Conference as it was an essential component of change. Moreover, the Global AIS Congress recognised that the AIXM was the only candidate and recommended that V5.0 (the GML based version) should be adopted by ICAO as the global standard.

5. The Global AIS Congress recognised the global nature of the AIXM and supported the ongoing work to define a means of providing for the further evolution of the model in a managed and supported (technically and financially) way. The proposed Global Board approach was endorsed as a way forward.

RECOMMENDATIONS

Recommendation 1: ICAO adopt the AICM/AIXM as the standard aeronautical information conceptual model and the standard aeronautical information exchange model, and

- develop appropriate means of compliance, and
- global mechanisms to manage and develop the AICM/AIXM.

Recommendation 2: ICAO should evolve the AIM Concept and associated performance requirements and develop a road map to plan, manage and facilitate on a world-wide basis the transition from AIS to AIM.

Recommendation 3: ICAO instigate an urgent review of Annex 4 and Annex 15 in accordance with the recommendation of the 11th Air Navigation Conference.

Recommendation 4: ICAO should incorporate transition activities into the Global Air Navigation Plan in order to ensure broad-based development of AIS/AIM capabilities across all ICAO Regions

Recommendation 5: ICAO should, as a matter of urgency address legal and institutional issues including those associated with an expansion of service from AIS to AIM that could constrain the adoption and implementation of AIM.

Recommendation 6: States working in close coordination with international organisations should support ICAO in any activity to accommodate the transition from AIS to AIM.

Recommendation 7: Recognising the critical nature of aeronautical information in the present and future ATM systems, States should give high priority to the implementation of existing Standards such as WGS-84 and Quality Management Systems and should, if necessary, request

assistance from ICAO or if appropriate international organisations to do so.

Recommendation 8: Recognising the social dimension associated with change, ICAO working with States and international organisations determine the required Staff Profile(s) for AIM and determine appropriate skills and competencies and amend existing guidance material and develop new guidance and training material, under the Trainair programme perhaps, to assist States and other AIS organisations in the transition process.

Recommendation 9: ICAO should promote open access to information.

Recommendation 10: That ICAO consider as a matter of priority how a Global Forum could be established.

ATM/SAR/AIS SG/8
Report on Agenda Item 11

REPORT ON AGENDA ITEM 11: REVIEW OF AIR NAVIGATION DEFICIENCIES in the ATM/SAR and AIS/MAP Fields

11.1 Under this agenda item, the meeting recalled that MIDANPIRG/8 Conclusion 8/54 invited MID States to allocate sufficient resources for the elimination of the air navigation deficiencies and urged them to inform ICAO of any implementation problems they encounter in the elimination of deficiencies within their State(s) giving the rationale for non-elimination of deficiencies. To this end, States were requested to formulate and review on a regular basis an action plan including the rationale for non-elimination of deficiencies. As a follow-up action to MIDANPIRG/8 Conclusion 8/54 related to air navigation deficiencies, MIDANPIRG/9, with a view to analyzing the rationale for non-elimination of air navigation deficiencies, under Conclusion 9/61, endorsed an amendment to the uniform methodology for the identification, assessment and reporting of air navigation deficiencies.

11.2 The meeting recalled also that MIDANPIRG/9 under Conclusion 9/63 agreed that a database of regional air navigation deficiencies that provides secure access to authorized users, be developed. The meeting noted that the database has been already developed and that it is expected that it will be available to States and users on the web very soon.

11.3 The meeting recognized that the level of implementation of ATS safety management in the MID Region is far below expectation, Annex 11 requirements related to the development and promulgation of contingency plans are also not met by the majority of MID States and that one of the major concerns in the MID Region is the delay observed in the development of the RVSM post-implementation safety analysis due to the non-provision of the required data by a number of States to MID RMA. Accordingly, the meeting agreed that this be reflected in the list of air navigation deficiencies in the ATM field.

11.4 The meeting reviewed and updated the list of deficiencies in the ATM/SAR and AIS/MAP fields as at **Appendices 11A** and **11B** to the report on Agenda Item 11.

ATM/SAR/AIS SG/8
Appendix 11A to the Report on Agenda Item 11

Deficiencies in the ATM field

AFGHANISTAN

Item No	Identification		Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action	
1	LIM/MID/RAN Concl. 3/7 Cooperation between States in SAR		Lack of Search and Rescue Agreements between neighboring States	Nov. 1994	Lack of SAR agreements can be detrimental to safety of persons in distress where searches overlap national boundaries. Draft Model SAR agreements adopted at MIDANPIRG/5. No significant progress achieved-ICAO to assist	S	A. States to commence negotiations with neighbors to establish SAR agreements B. Implement operational SAR agreements C. Implement entry agreements for SAR aircraft of other States	Afghanistan	Dec.2008	A
2	MID ANP Table ATS-1 Plan of ATS routes	Afghanistan Uzbekistan	Segment of ATS route A219 not implemented	Dec. 1997	ICAO to follow up with States to determine what action is needed to achieve implementation Probably to extend B466 till TERMEZ in the MID Plan and delete requirement for A219.	O	Segment Kandahar – Termez: Not implemented	Afghanistan Uzbekistan	Dec. 2007	B

⁽¹⁾ Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Item No	Identification		Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action	
3	Annex 11 Para. 2.28	Afghanistan ICAO	Development of contingency plans	Nov. 2006		H, S	Need to develop and promulgate contingency plans for implementation in the event of disruption of ATS and related supporting services	Afghanistan ICAO		A
4	Annex 11 para. 2.26	Afghanistan ICAO	Implementation of ATS Safety Management	Nov. 2006		H	Need to establish a safety programme in order to achieve an acceptable level of safety in the provision of ATS	Afghanistan and ICAO		A

⁽¹⁾ Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Deficiencies in the ATM field

BAHRAIN

Item No	Identification		Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action	
1	LIM/MID/RAN Concl. 3/7 Cooperation between States in SAR	Bahrain with neighboring States	Lack of Search and Rescue Agreements between neighboring States	Nov. 1994	Lack of SAR agreements can be detrimental to safety of persons in distress where searches overlap national boundaries. Draft Model SAR agreements adopted at MIDANPIRG/5. No significant progress achieved-ICAO to assist	S	A. States to commence negotiations with neighbors to establish SAR agreements B. Implement operational SAR agreements C. Implement entry agreements for SAR aircraft of other States	Bahrain	Jun.2008	A
2	MID ANP Table ATS-1 Plan of ATS routes	Bahrain Iran Qatar	Segment MIDS1-PIMAL of ATS route A453 not implemented	Dec. 1997	Initial direct alignment KISH – BAHRAIN was changed to pass via PIMAL. Still not yet implemented-Economic impact-Not affecting safety (Alternative Route R219)	S	States to follow-up	Bahrain Iran ICAO	Dec.2007	B

(1) Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Item No	Identification		Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action	
3	MID ANP Table ATS-1 Plan of ATS routes	Bahrain Qatar Saudi Arabia	ATS route B419 not implemented	Dec. 1997	Not implemented Doha - King Fahd- Economic impact Subject to military restrictions Saudi Arabia ready to implement	S	States to continue negotiations with one another and military	Bahrain Qatar Saudi Arabia	Dec.2006	B
4	Annex 11 Para. 2.28		Development of contingency plan	Nov. 2006	Under development		Need to develop and promulgate contingency plans for implementation in the event of disruption of ATS and related supporting services	Bahrain ICAO	Mar.2007	A

⁽¹⁾ Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Deficiencies in the ATM field

EGYPT

Item No	Identification		Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action	
1	LIM/MID/RAN Concl. 3/7 Cooperation between States in SAR	Most of MID States	Lack of Search and Rescue Agreements between neighboring States	Nov. 1994	Lack of SAR agreements can be detrimental to safety of persons in distress where searches overlap national boundaries. Draft Model SAR agreements adopted at MIDANPIRG/5. Egypt issued regulation and started development of SAR agreement with Cyprus.	S	A. States to commence negotiations with neighbors to establish SAR agreements B. Implement operational SAR agreements C. Implement entry agreements for SAR aircraft of other States	Egypt with neighboring States	Dec.2007	A
2	Annex 11 para. 2.26		Implementation of ATS Safety Management	Nov. 2006	Under development	H	Need to establish a safety programme in order to achieve an acceptable level of safety in the provision of ATS	Egypt	Jun.2008	A
3	Annex 11 Para. 2.28		Development of contingency plan	Nov. 2006		H	Need to develop and promulgate contingency plans for implementation in the event of disruption of ATS and related supporting services	Egypt ICAO	Jun.2008	A

(1) Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Deficiencies in the ATM field

IRAN

Item No	Identification		Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action	
1	LIM/MID/RAN Concl. 3/7Cooperation between States in SAR	Most of MID States	Lack of Search and Rescue Agreements between neighboring States	Nov. 1994	Lack of SAR agreements can be detrimental to safety of persons in distress where searches overlap national boundaries. Draft Model SAR agreements adopted at MIDANPIRG/5. No significant progress achieved-ICAO to assist	S	A. States to commence negotiations with neighbors to establish SAR agreements B. Implement operational SAR agreements C. Implement entry agreements for SAR aircraft of other States	Iran with neighboring States	Dec.2007	A
2	MID ANP Table ATS-4	ATS route	ATS route A453 not implemented	Dec. 1997	Initial direct alignment KISH-BAHRAIN was changed to pass via PIMAL. Still not yet implemented. Economic impact, not affecting safety	S	States to follow up	Bahrain Iran ICAO	Dec.2005	B

⁽¹⁾ Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Item No	Identification		Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action	
3	MID ANP Table ATS-1 Plan of ATS routes	Iran	ATS route G665 not implemented	Dec. 1997	Implemented, but segment Shiraz-NABOD is only available at Under negotiation with military side	S	ICAO to follow up with Iran to determine what action is needed to achieve full implementation	ICAO	Dec. 2006	B
4	MID ANP Table ATS-1 Plan of ATS Routes		ATS route G667 not implemented	Sep. 2006	Implementation of G667 segment between Abadan and Kuwait is under negotiation with military side and with Iraq	S		Iran Iraq Kuwait	Mar. 2007	B
5	Annex 11 Para. 2.28		Development of contingency plans	Nov. 2006			Need to develop and promulgate contingency plans for implementation in the event of disruption of ATS and related supporting services	Iran ICAO		A
6	Annex 11 para. 2.26		Implementation of ATS Safety Management	Nov. 2006		H	Need to establish a safety programme in order to achieve an acceptable level of safety in the provision of ATS	Iran		A

(1) Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Deficiencies in the ATM field

IRAQ

Item No	Identification		Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action	
4	MID-ANP Table ATS-4	Iraq	With the recent developments in Iraq, the ATS route requirements over Baghdad FIR is being reviewed in consultation with the State, IATA and the coalition forces		-To follow up with all parties concerned.-Need for review communication coordination procedures have been highlighted	H, S, O	-New requirements being identified in consultation with the State, IATA and the coalition forces-Parallel route network developed within the framework of informal coordination meetings organized by ICAO. Tentative implementation date 25 November 2004	Iraq, ICAO, IATA, Coalition Forces	Dec.2004	A
2	LIM/MID/RAN Concl. 3/7 Cooperation between States in SAR	Iraq with neighboring States	Lack of Search and Rescue Agreements between neighboring States	Nov. 1994	Lack of SAR agreements can be detrimental to safety of persons in distress where searches overlap national boundaries. Draft Model SAR agreements adopted at MIDANPIRG/5. No significant progress achieved-ICAO to assist	S	A. States to commence negotiations with neighbors to establish SAR agreements B. Implement operational SAR agreements C. Implement entry agreements for SAR aircraft of other States	Iraq with neighboring States	Dec.2007	A

(1) Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Item No	Identification		Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action	
3	MID ANP Table ATS-1 Plan of ATS Routes		ATS route G667 not implemented	Sep. 2006	Implementation of G667 segment between Abadan and Kuwait is under negotiation with military side and with Iraq	S		Iraq Iran Kuwait	Mar.2007	B
4	Annex 11 Para. 2.28		Development of contingency plan	Nov. 2006		S	Need to develop and promulgate contingency plan for implementation in the event of disruption of ATS and related supporting services	Iraq ICAO	Jun.2008	A
5	Annex 11 para. 2.26		Implementation of ATS Safety Management	Nov. 2006		H	Need to establish a safety programme in order to achieve an acceptable level of safety in the provision of ATS	Iraq and ICAO	Dec.2007	A

⁽¹⁾ Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Deficiencies in the ATM field

ISRAEL

Item No	Identification		Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action	
1	LIM/MID/RAN Concl. 3/7 Cooperation between States in SAR	Israel with neighboring States	Lack of Search and Rescue Agreements between neighboring States	Nov. 1994	Lack of SAR agreements can be detrimental to safety of persons in distress where searches overlap national boundaries. Draft Model SAR agreements adopted at MIDANPIRG/5. No significant progress achieved-ICAO to assist	S	A. States to commence negotiations with neighbors to establish SAR agreements B. Implement operational SAR agreements C. Implement entry agreements for SAR aircraft of other States	Israel with neighboring States	Dec.2005	A
2	MID ANP Table ATS-1 Plan of ATS routes	Israel Jordan Syria	ATS route A412 not implemented	Dec. 1997	Jerusalem to Amman not yet implemented (Informed by Jordan that implementation not possible at present - non-technical nature of issue noted) Segment Amman - Tanf shown as A 52)	S	ICAO to follow up with States to determine what action is needed to achieve implementation	States-ICAO to assist	Dec.2006	B

(1) Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Item No	Identification		Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action	
3	MID ANP Table ATS-1 Plan of ATS routes	Israel Jordan Syria	ATS route R653 not implemented	Dec. 1997	-No sections implemented-Non-technical nature of issue noted- aircraft using alternative routes- economic impact only	S		States/IATA and ICAO to assist	Dec. 2006	B
4	MID ANP Table ATS-1 Plan of ATS routes	Israel Jordan	ATS route G664 not implemented	Dec. 1997	A route exists within Nicosia FIR till boundary of Tel Aviv FIR (APLON-LEDRA-SOLIN) Requirement is from Ben Gurion to Amman Non-technical nature of issue noted	S	The need for the establishment of an ATS route between Ben Gurion and Amman has been identified.	Israel Jordan ICAO to assist	Dec. 2006	B
5	MID ANP Table ATS-1 Plan of ATS routes	Israel Cyprus	ATS route B406 not implemented	Dec. 1997	No sections implemented Implemented as B17/UB17 Larnaca-MERVA(FIR BDY)	S/O	To be followed by both the ICAO EUR and MID Offices	Israel Cyprus ICAO to assist	Dec. 2006	B
6	Annex 11 Para. 2.28		Development of contingency plans	Nov. 2006			Need to develop and promulgate contingency plans for implementation in the event of disruption of ATS and related supporting services	Israel ICAO		A

(1) Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action
7	Annex 11 para. 2.26		Implementation of ATS Safety Management	Nov. 2006	H	Need to establish a safety programme in order to achieve an acceptable level of safety in the provision of ATS	Israel		A

⁽¹⁾ Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Deficiencies in the ATM field

JORDAN

Item No	Identification		Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action	
4	MID ANP Table ATS-1 Plan of ATS routes	Israel Jordan Syria	ATS route A412 not implemented	Dec. 1997	Jerusalem to Amman not yet implemented Segment Amman – Tanf shown as A 52)	S	ICAO to follow up with States to determine what action is needed to achieve implementation	States ICAO to assist	Dec.2006	B
2	MID ANP Table ATS-1 Plan of ATS routes	Jordan Syria	ATS route B412 not implemented	Dec. 1997	Most segments not implemented. Jordan ready to implement.-Only segment RBG - King Abdulaziz implemented	S	States to co-ordinate to finalize implementation- Realignment would be considered	Jordan Syria ICAO to assist	Dec. 2006	B
3	MID ANP Table ATS-1 Plan of ATS routes	Israel Jordan Syria	ATS route R653 not implemented	Dec. 1997	-No sections implemented Non-technical nature of issue noted- aircraft using alternative routes- economic impact only	S		States, IATA and ICAO to assist	Dec. 2006	B

(1) Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Item No	Identification		Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action	
4	MID ANP Table ATS-1 Plan of ATS routes	Israel Jordan	ATS route G664 not implemented	Dec. 1997	A route exists within Nicosia FIR till boundary of Tel Aviv FIR (APLON-LEDRA-SOLIN) Requirement is from Ben Gurion to Amman Non-technical nature of issue noted	S	The need for the establishment of an ATS route between Ben Gurion and Amman has been identified.	Israel Jordan ICAO to assist	Dec. 2006	B
5	MID ANP Table ATS-1 Plan of ATS routes	Jordan Syria	ATS route G662 not implemented	Dec. 1997	Not implemented Damascus to Guriat	S	States to continue coordination to achieve implementation	Jordan Syria	Dec. 2006	B
6	MID ANP Table ATS-1 Plan of ATS routes	Jordan Lebanon Turkey	ATS route B545 not implemented	Dec. 1997	Segment MUT-BALMA: Implemented as UL620. Segment KHALDEH-AMMAN: Not implemented Non-technical nature- Economic impact Segment BALMA- Khaldch: B15)	S	To be discussed in EMAC*** meetings. ICAO to follow up	Jordan Lebanon-Syria	Dec. 2006	B

(1) Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action
7	Annex 11 Para. 2.28		Development of contingency plan	Nov. 2006		Need to develop and promulgate contingency plan for implementation in the event of disruption of ATS and related supporting services	Jordan ICAO		A
8	Annex 11 para. 2.26		Implementation of ATS Safety Management	Nov. 2006	H	Need to establish a safety programme in order to achieve an acceptable level of safety in the provision of ATS	Jordan		A

⁽¹⁾ Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Deficiencies in the ATM field

KUWAIT

Item No	Identification		Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action	
1	LIM/MID/RAN Concl. 3/7 Cooperation between States in SAR	Kuwait with neighboring States	Lack of Search and Rescue Agreements between neighboring States	Nov. 1994	Lack of SAR agreements can be detrimental to safety of persons in distress where searches overlap national boundaries. Draft Model SAR agreements adopted at MIDANPIRG/5. No significant progress achieved-ICAO to assist	S	A. States to commence negotiations with neighbors to establish SAR agreements B. Implement operational SAR agreements C. Implement entry agreements for SAR aircraft of other States	Kuwait with neighboring States	Dec.2007	A
2	MID ANP Table ATS-1 Plan of ATS Routes		ATS route G667 not implemented	Sep. 2006	Implementation of G667 segment between Abadan and Kuwait is under negotiation with military side and with Iraq	S		Iraq Iran Kuwait	Mar.2007	B
3	Annex 11 para. 2.26		Implementation of ATS Safety Management	Nov. 2006	Implementation of SMS is expected to start in Jan.2007	H	Need to establish a safety programme in order to achieve an acceptable level of safety in the provision of ATS	Kuwait	Jan.2008	A

(1) Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action
4	Annex 11 Para. 2.28		Development of contingency plan	Nov. 2006		Need to develop and promulgate contingency plan for implementation in the event of disruption of ATS and related supporting services	Kuwait ICAO	Jul.2007	A

⁽¹⁾ Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Deficiencies in the ATM field

LEBANON

Item No	Identification		Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action	
1	LIM/MID/RAN Concl. 3/7 Cooperation between States in SAR	Lebanon with neighboring States	Lack of Search and Rescue Agreements between neighboring States	Nov. 1994	Lack of SAR agreements can be detrimental to safety of persons in distress where searches overlap national boundaries. Draft Model SAR agreements adopted at MIDANPIRG/5. No significant progress achieved-ICAO to assist	S	A. States to commence negotiations with neighbors to establish SAR agreements B. Implement operational SAR agreements C. Implement entry agreements for SAR aircraft of other States	Lebanon with neighboring States	Dec.2007	A
2	MID ANP Table ATS-4 Plan of ATS routes	Lebanon Syria	ATS route B410 not implemented	Dec. 1997	UL620 proceeding to BALMA then, R655-ChekkaChekka-Damascus to be implemented Non-technical nature-Economic impact-Aircraft using longer routes	S	To be discussed in EMAC*** meetings-	Syria ICAO to assist	Dec. 2006	B

(1) Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Item No	Identification		Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action	
3	MID ANP Table ATS-1 Plan of ATS routes	Lebanon Syria	ATS route G202 not implemented	Dec. 1997	Not implemented DAKWE - Damascus Economic impact-alternative routes available but longer-Not affecting safety	S	ICAO to follow-up	Lebanon Syria	Dec. 2006	B
4	MID ANP Table ATS-1 Plan of ATS routes	Jordan Lebanon Turkey	ATS route B545 not implemented	Dec. 1997	Segment MUT-BALMA: Implemented as UL620.Segment KHALDEH-AMMAN: Not implemented Non-technical nature-Economic impactSegment BALMA- Khaldeh: B15)	S	To be discussed in EMAC*** meetings.ICAO to follow up	Jordan Lebanon Syria	Dec. 2006	B
5	Annex 11 para. 2.26		Implementation of ATS Safety Management	Nov. 2006		H	Need to establish a safety programme in order to achieve an acceptable level of safety in the provision of ATS	Lebanon		A
6	Annex 11 Para. 2.28		Development of contingency plan	Nov. 2006			Need to develop and promulgate contingency plan for implementation in the event of disruption of ATS and related supporting services	Lebanon ICAO		A

(1) Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Deficiencies in the ATM field

OMAN

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action
1	LIM/MID/RAN Concl. 3/7 Cooperation between States in SAR	Oman with neighboring States	Lack of Search and Rescue Agreements between neighboring States	Nov. 1994	Lack of SAR agreements can be detrimental to safety of persons in distress where searches overlap national boundaries. Draft Model SAR agreements adopted at MIDANPIRG/5.	S A. States to commence negotiations with neighbors to establish SAR agreements B. Implement operational SAR agreements C. Implement entry agreements for SAR aircraft of other States	Oman with neighboring States	Jun.2008	A
2	Annex 11 Para. 2.28		Development of contingency plans	Nov. 2006	Under development	Need to develop and promulgate contingency plans for implementation in the event of disruption of ATS and related supporting services	Oman ICAO	Jun.2007	A

(1) Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

11A-21

Deficiencies in the ATM field

QATAR

Item No	Identification		Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action	
1	LIM/MID/RAN Concl. 3/7 Cooperation between States in SAR	Qatar and Bahrain with neighboring States	Lack of Search and Rescue Agreements between neighboring States	Nov. 1994	Lack of SAR agreements can be detrimental to safety of persons in distress where searches overlap national boundaries. Draft Model SAR agreements adopted at MIDANPIRG/5. No significant progress achieved-ICAO to assist	S	A. States to commence negotiations with neighbors to establish SAR agreements B. Implement operational SAR agreements C. Implement entry agreements for SAR aircraft of other States	Qatar and Bahrain	Jun.2008	A
2	MID ANP Table ATS-1 Plan of ATS routes	Bahrain Iran Qatar	ATS route A453 not implemented	Dec. 1997	Initial direct alignment KISH – BAHRAIN was changed to pass via PIMAL. Still not yet implemented-Economic impact-Not affecting safety	S	States to follow-up	Bahrain Iran Qatar	Dec. 2007	B

⁽¹⁾ Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Item No	Identification		Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action	
3	MID ANP Table ATS-1 Plan of ATS routes	Qatar Saudi Arabia	ATS route A415 not implemented	Dec. 1997	Doha to King Khalid implemented at variance with the Plan . slightly longer-Military restrictions Economic impact- Not affecting safety	S	Saudi Arabia and Qatar to continue negotiations to open this route.	Saudi Arabia Qatar	Dec. 2006	B
4	MID ANP Table ATS-1 Plan of ATS routes	Bahrain Qatar Saudi Arabia	ATS route B419 not implemented	Dec. 1997	Not implemented Doha - King Fahd- Economic impact Subject to military restrictions Saudi Arabia ready to implement	S	States to continue negotiations with one another and military	Bahrain Qatar Saudi Arabia	Dec. 2006	B
5	Annex 11 para. 2.26		Implementation of ATS Safety Management	Nov. 2006		H	Need to establish a safety programme in order to achieve an acceptable level of safety in the provision of ATS	Qatar		A
6	Annex 11 Para. 2.28		Development of contingency plan	Nov. 2006		S	Need to develop and promulgate contingency plans for implementation in the event of disruption of ATS and related supporting services	Qatar Bahrain ICAO		A

(1) Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Deficiencies in the ATM field

SAUDI ARABIA

Item No	Identification		Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action	
1	LIM/MID/RAN Concl. 3/7 Cooperation between States in SAR	Saudi Arabia with neighboring States	Lack of Search and Rescue Agreements between neighboring States	Nov. 1994	Lack of SAR agreements can be detrimental to safety of persons in distress where searches overlap national boundaries. Draft Model SAR agreements adopted at MIDANPIRG/5. No significant progress achieved-ICAO to assist	S	A. States to commence negotiations with neighbors to establish SAR agreements B. Implement operational SAR agreements C. Implement entry agreements for SAR aircraft of other States	Saudi Arabia with neighboring States	Jun.2008	A
2	MID ANP Table ATS-1 Plan of ATS routes	Qatar Saudi Arabia	ATS route A415 not implemented	Dec. 1997	Doha to King Khalid implemented at variance with the Plan . slightly longer-Military restrictions Economic impact- Not affecting safety	S	Saudi Arabia and Qatar to continue negotiations to open this route.	Saudi Arabia Qatar	Dec. 2008	B

⁽¹⁾ Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Item No	Identification		Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action	
3	MID ANP Table ATS-4 Plan of ATS routes	Bahrain Qatar Saudi Arabia	ATS route B419 not implemented	Dec. 1997	Not implemented Doha – King Fahd- Economic impact Subject to military restrictions Saudi Arabia ready to implement	S	States to continue negotiations with one another and military	Bahrain Qatar Saudi Arabia	Dec. 2006	B
4	MID ANP Table ATS-4 Plan of ATS routes	Saudi Arabia U.A.E.	ATS route G660 not implemented	Dec. 1997	Not implemented King Abdulaziz to Abu Dhabi- Economic impact- Not affecting safety	S	States to organize informal coordination meeting to review route structure from Gulf south into Arabian Peninsula	States	Dec. 2006	B
5	Annex 11 Para. 2.28		Development of contingency plan	Nov. 2006			Need to develop and promulgate contingency plan for implementation in the event of disruption of ATS and related supporting services	Saudi Arabia ICAO	Dec. 2007	A
6	Annex 11 Para. 3.3.4.1		Non-provision of required data to the MID RMA	Nov. 2006			Need to provide the MID RMA with required data in order to enable it to discharge its functions and responsibilities	Saudi Arabia MID RMA	Dec. 2006	A
7	Annex 11 para. 2.26		Implementation of ATS Safety Management	Nov. 2006	QMS Department established	H	Need to establish a safety programme in order to achieve an acceptable level of safety in the provision of ATS	Saudi Arabia	Feb. 2007	A

⁽¹⁾ Rationale for non-elimination: “F”= Financial

“H”= Human Resources

“S”= State (Military/political)

“O”= Other unknown causes

11A-25

Deficiencies in the ATM field

SYRIA

Item No	Identification		Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action	
1	LIM/MID/RAN Concl. 3/7 Cooperation between States in SAR	Syria with neighboring States	Lack of Search and Rescue Agreements between neighboring States	Nov. 1994	Lack of SAR agreements can be detrimental to safety of persons in distress where searches overlap national boundaries. Draft Model SAR agreements adopted at MIDANPIRG/5. Agreement with Turkey and Cyprus in final stage of preparation.	S	A. States to commence negotiations with neighbors to establish SAR agreements B. Implement operational SAR agreements C. Implement entry agreements for SAR aircraft of other States	Syria with neighboring States	Jan.2008	A
2	MID ANP Table ATS-1 Plan of ATS routes	Lebanon Syria	ATS route B410 not implemented	Dec. 1997	UL620 proceeding to BALMA then, R655-ChekkaChekka-Damascus to be implemented-Non-technical nature-Economic impact-Aircraft using longer routes	S	To be discussed in EMAC*** meetings.	Syria ICAO to assist	Dec. 2007	B

(1) Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Item No	Identification		Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action	
3	MID ANP Table ATS-1 Plan of ATS routes	Israel Jordan Syria	ATS route R653 not implemented	Dec. 1997	No sections implemented Non-technical nature of issue noted- aircraft using alternative routes- economic impact only	S		States/IATA and ICAO to assist	Dec. 2006	B
4	MID ANP Table ATS-1 Plan of ATS routes	Jordan Syria	ATS route G662 not implemented	Dec. 1997	Not implemented Damascus to Guriat	S	States to continue coordination to achieve implementation	Jordan Syria	Dec. 2006	B
5	MID ANP Table ATS-1 Plan of ATS routes	Lebanon Syria	ATS route G202 not implemented	Dec. 1997	Not implemented DAKWE - Damascus Economic impact- alternative routes available but longer-Not affecting safety	S	ICAO to follow-up	Lebanon Syria	Dec. 2007	B
6	MID ANP Table ATS-1 Plan of ATS routes	Jordan Syria	ATS route B412 not implemented	Dec. 1997	Most segments not implemented Jordan ready to implement- Only segment RBG- King Abdulaziz implemented	S	States to co-ordinate to finalize implementation Informal meeting proposed by ATM/SAR/AIS SG/7- Realignment would be considered	Jordan Syria ICAO to assist	Dec. 2006	B

(1) Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination		Description	Executing body	Date of completion	Priority for action
7	MID-ANP Table ATS-1 Plan of ATS routes	Israel Jordan Syria	ATS route A412 not implemented	Dec. 1997	Jerusalem to Amman not yet implemented (Informed by Jordan that implementation not possible at present - non-technical nature of issue noted) Segment Amman - Tanf shown as A 52)	S	ICAO to follow up with States to determine what action is needed to achieve implementation	States ICAO to assist	Dec.2006	B
8	MID-ANP Table ATS-1 Plan of ATS routes	Syria Turkey	ATS route B538 not implemented within Damascus FIR	Dec. 1997	(Segment Gaziantep - Aleppo: B544/V836) (segment Aleppo - Kariatain: W5) (Not implemented: Kariatain - Damascus) Economic impact alternative routes available Not affecting safety	S	ICAO to follow up with States to determine what action is needed to achieve implementation	ICAO	Dec. 2006	B
9	Annex 11 para. 2.26		Implementation of ATS Safety Management	Nov. 2006	Committee established	H	Need to establish a safety programme in order to achieve an acceptable level of safety in the provision of ATS	Syria	Jan.2008	A

(1) Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action
10	Annex 11 Para. 2.28		Development of contingency plans	Nov. 2006	Draft available	Need to develop and promulgate contingency plans for implementation in the event of disruption of ATS and related supporting services	Syria ICAO	Mar.2007	A

⁽¹⁾ Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Deficiencies in the ATM field

UAE

Item No	Identification		Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action	
1	Annex 11 Para. 3.3.4.1		Non-provision of required data to the MID RMA			O	Need to provide the MID RMA with required data in order to enable it to discharge its functions and responsibilities	UAE MID RMA	Mar.2007	A
2	LIM/MID/RAN Concl. 3/7 Cooperation between States in SAR	UAE with neighboring States	Lack of Search and Rescue Agreements between neighboring States	Nov. 1994	Lack of SAR agreements can be detrimental to safety of persons in distress where searches overlap national boundaries. Draft Model SAR agreements adopted at MIDANPIRG/5. The agreement with Bahrain and Oman to be updated and the one with Iran has to be developed/coordinated.	S	A. States to commence negotiations with neighbors to establish SAR agreements B. Implement operational SAR agreements C. Implement entry agreements for SAR aircraft of other States	UAE with neighboring States	Dec.2007	A

(1) Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Item No	Identification		Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action	
3	MID-ANP Table ATS-1 Plan of ATS routes	-	ATS route G660 not implemented	Dec. 1997	Not implemented King-Abdulaziz to Abu Dhabi- Economic impact- Not affecting safety	S	States to organize informal coordination meeting to review route structure from Gulf south into Arabian Peninsula	Saudi Arabia UAE	Dec. 2006	B
4	Annex 11 Para. 2.28		Development of contingency plan	Nov. 2006			Need to develop and promulgate contingency plans for implementation in the event of disruption of ATS and related supporting services	UAE ICAO	Jun.2007	A

(1) Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Deficiencies in the ATM field

YEMEN

Item No	Identification		Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action	
1	LIM/MID/RAN Concl. 3/7 Cooperation between States in SAR	Yemen with neighboring States	Lack of Search and Rescue Agreements between neighboring States	Nov. 1994	Lack of SAR agreements can be detrimental to safety of persons in distress where searches overlap national boundaries. Draft Model SAR agreements adopted at MIDANPIRG/5. No significant progress achieved ICAO to assist	S	A. States to commence negotiations with neighbors to establish SAR agreements B. Implement operational SAR agreements C. Implement entry agreements for SAR aircraft of other States	Yemen with neighboring States	Dec.2007	A
2	Annex 11 Para. 2.28		Development of contingency plan	Nov. 2006			Need to develop and promulgate contingency plan for implementation in the event of disruption of ATS and related supporting services	Yemen ICAO		A
3	Annex 11 para. 2.26		Implementation of ATS Safety Management	Nov. 2006		H	Need to establish a safety programme in order to achieve an acceptable level of safety in the provision of ATS	Yemen		A

(1) Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Note:

* Priority for action to remedy a deficiency is based on the following safety assessments:

“U” priority = Urgent requirements having a direct impact on safety and requiring immediate corrective actions.

Urgent requirement consisting of any physical, configuration, material, performance, personnel or procedures specification, the application of which is urgently required for air navigation safety.

“A” priority = Top priority requirements necessary for air navigation safety.

Top priority requirement consisting of any physical, configuration, material, performance, personnel or procedures specification, the application of which is considered necessary for air navigation safety.

“B” priority = Intermediate requirements necessary for air navigation regularity and efficiency.

Intermediate priority requirement consisting of any physical, configuration, material, performance, personnel or procedures specification, the application of which is considered necessary for air navigation regularity and efficiency.

Definition:

A *deficiency* is a situation where a facility, service or procedure does not comply with a regional air navigation plan approved by the Council, or with related ICAO Standards and Recommended Practices, and which situation has a negative impact on the safety, regularity and/or efficiency of international civil aviation.

⁽¹⁾ Rationale for non-elimination: “F”= Financial

“H”= Human Resources

“S”= State (Military/political)

“O”= Other unknown causes

ATM/SAR/AIS SG/8
Appendix 11B to the Report on Agenda Item 11

Deficiencies in the AIS/MAP field

AFGHANISTAN

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination		Description	Executing body	Date of completion	Priority for action
1	ANNEX 15: Para 6.		Lack of implementation of AIRAC System	May, 1995	ICAO to follow up with State	F H O	Need for implementation of AIRAC requirements	Afghanistan	Dec, 2006	U
2	ANNEX 4: Para 16.2		Non-production of World Aeronautical Chart – ICAO 1:1 000 000	May, 1995		F H S	Need to produce the assigned sheets of the World Aeronautical Chart – ICAO 1:1 000 000	Afghanistan	Dec, 2006	B
3	ANNEX 4 Para. 7.2		Non-production of the Enroute Chart-ICAO	May, 1995		F H O	Need to produce the Enroute Chart-ICAO	Afghanistan	Dec, 2006	A
4	ANNEX 4: Para 3.2		Non-production of Aerodrome Obstacle Chart-ICAO Type A	May, 1995		F H O	Need to produce Aerodrome Obstacle Chart-ICAO Type A for all Int'l Airports RWYs, except if a notification to this effect is published in the AIP (if no significant obstacles exist)	Afghanistan	Dec, 2006	A
5	ANNEX 4: Para 13.2		Non-production of Aerodrome/ Heliport Chart - ICAO	May, 1995		F H O	Need to produce Aerodrome/ Heliport Chart - ICAO for all Int'l Aerodromes	Afghanistan	Dec, 2006	A
6	ANNEX 15: Para 4.1.1		Newly Restructured AIP tested	Jun, 1996		F H O	Need to produce and issue the new restructured AIP	Afghanistan	Dec, 2006	U

⁽¹⁾ Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination		Description	Executing body	Date of completion	Priority for action
7	ANNEX 15: Para 3.7.1		Implementation of WGS-84	Dec, 1997		F H O	Need to implement WGS-84	Afghanistan	Dec, 2006	U
8	ANNEX 15: Para 4.2.9 & 4.3.7		Lack of regular and effective updating of the AIP	Jan, 2003	ICAO to follow up with State	F H O	Need to update the AIP on a regular basis	Afghanistan	Dec, 2006	U
9	ANNEX 15: Para. 3.2		Implementation of a Quality System	Jan, 2003		F H O	Need to introduce a properly organized quality system in conformity with ISO 9000 series of quality assurance standards.	Afghanistan	Dec, 2006	U
10	ANNEX 15: Para. 5.2.8.3		Non-production of the monthly printed plain language summary of NOTAM	Jan, 2003		H O	Need to produce the monthly printed plain language summary of NOTAM	Afghanistan	Dec, 2006	A
11	ANNEX 4: Para 11.2		Non-production of Instrument Approach Chart-ICAO	Jan, 2003		F H O	Need to produce Instrument Approach Chart-ICAO for all Int'l Aerodromes	Afghanistan	Dec, 2006	A
12	ANNEX 15: Para. 8.1		Non provision of pre-flight information service at international airports	Mar, 2004		F H O	Need to provide a pre-flight information service at all aerodromes used for international air operations.	Afghanistan	Dec, 2006	A

⁽¹⁾ Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Deficiencies in the AIS/MAP field

EGYPT

Item No	Identification		Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action	
4	ANNEX 4: Para. 16.2		Non-production of World Aeronautical Chart—ICAO 1:1 000 000	May, 1995		F S	Need to produce the assigned sheets of the World Aeronautical Chart—ICAO 1:1 000 000	Egypt	Dec, 2006	B
2	ANNEX 4: Chart Production requirements		Non-production of Precision Approach Terrain Chart-ICAO	Jan, 2003		F O	Need to produce Precision Approach Terrain Chart-ICAO for precision approach RWYs CAT II and III.	Egypt	Dec, 2005	A
3	ANNEX 4: Para. 3.2		Non-production of Aerodrome Obstacle Chart ICAO Type A	Mar, 2004	For some RWYs in Egypt, the Aerodrome Obstacle Chart-ICAO Type A has not been produced	F O	Need to produce Aerodrome Obstacle Chart ICAO Type A for all Int'l Airports RWYs, except if a notification to this effect is published in the AIP (if no significant obstacles exist)	Egypt	Sep, 2005	A

⁽¹⁾ Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Deficiencies in the AIS/MAP field

IRAN

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination		Description	Executing body	Date of completion	Priority for action
1	ANNEX 4: Para. 16.2		Non-production of World Aeronautical Chart – ICAO 1:1 000 000	May, 1995	Coordination with neighboring States required	F H S	Need to produce the assigned sheets of the World Aeronautical Chart – ICAO 1:1 000 000	Iran+neighboring states	Dec, 2007	B
2	ANNEX 4: Para. 13.2		Non-production of Aerodrome/ Heliport Chart - ICAO	May, 1995		F H	Need to produce Aerodrome/ Heliport Chart - ICAO for all Int'l Aerodromes	Iran	Mar, 2007	A
3	ANNEX 4: Para. 3.2		Non-production of Aerodrome Obstacle Chart-ICAO Type A	May, 1995	ICAO to follow up with State	F O	Need to produce Aerodrome Obstacle Chart-ICAO Type A for all Int'l Airports RWYs, except if a notification to this effect is published in the AIP (if no significant obstacles exist)	Iran	Dec, 2007	A
4	ANNEX 4: Para. 6.2		Precision Approach Terrain Chart ICAO for Tehran Mehrabad Int'l Airport RWY 29L not updated	Jul, 2001		F H	Precision Approach Terrain Chart ICAO for Tehran Mehrabad Int'l Airport RWY 29L has to be updated	Iran	Jun, 2005	A
5	ANNEX 15: Para. 3.2		Implementation of a Quality System	Jan, 2003	ICAO to follow up with State	F H	Need to introduce a properly organized quality system in conformity with ISO 9000 series of quality assurance standards.	Iran	Dec, 2007	U

(1) Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

11B-5

Deficiencies in the AIS/MAP field

IRAQ

Item No	Identification		Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action	
1	ANNEX 15: Para 6.		Lack of implementation of AIRAC System	May, 1995	ICAO to follow up with State	F H O	Need to fully comply with the AIRAC procedure	Iraq	Dec, 2006	U
2	ANNEX 4: Para. 16.2		Non-production of World Aeronautical Chart – ICAO 1:1 000 000	May, 1995		F H S	Need to produce the assigned sheets of the World Aeronautical Chart – ICAO 1:1 000 000	Iraq	Dec, 2006	B
3	ANNEX 4: Para. 13.2		Non-production of Aerodrome/ Heliport Chart - ICAO	May, 1995		F H O	Need to produce Aerodrome/ Heliport Chart - ICAO for all Int'l Aerodromes	Iraq	Dec, 2006	A
4	ANNEX 4: Para. 7.2		Non-production of the Enroute Chart-ICAO	May, 1995		F H O	Need to produce the Enroute Chart-ICAO	Iraq	Dec, 2006	A
5	ANNEX 15: Para 4.1.1		Newly Restructured AIP	Jun, 1996		F H O	Need to produce and issue the new restructured AIP	Iraq	Dec, 2006	U
6	ANNEX 15: Para 3.7.1		Implementation of WGS-84	Dec, 1997		F H O	Need to implement WGS-84	Iraq	Dec, 2006	U
7	ANNEX 15: Para 4.2.9 & 4.3.7		Lack of regular and effective updating of the AIP	Jan, 2003	ICAO to follow up with State	F H O	Need to update the AIP on a regular basis	Iraq	Dec, 2006	U

(1) Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Item No	Identification		Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action	
8	ANNEX 15: Para. 3.2		Implementation of a Quality System	Jan, 2003		F H O	Need to introduce a properly organized quality system in conformity with ISO 9000 series of quality assurance standards.	Iraq	Dec, 2007	U
9	ANNEX 4: Para. 11.2		Non-production of Instrument Approach Chart-ICAO	Jan, 2003		F H O	Need to produce Instrument Approach Chart-ICAO for all Int'l Aerodromes	Iraq	Dec, 2006	A
10	ANNEX 15: Para. 5.2.8.3		Non-production of the monthly printed plain language summary of NOTAM	Jan, 2003		H O	Need to produce the monthly printed plain language summary of NOTAM	Iraq	Dec, 2006	A
44	ANNEX 4: Chart production requirements		Non production of Precision Approach Terrain Chart-ICAO	Jan, 2003		F H O	Need to produce Precision Approach Terrain Chart-ICAO for precision approach RWYs CAT II and III.	Iraq	Dec, 2005	A
12	ANNEX 15: Para. 8.1		Non provision of pre-flight information service at international airports	Mar, 2004		F H O	Need to provide a pre-flight information service at all aerodromes used for international air operations.	Iraq	Dec, 2006	A

⁽¹⁾ Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

11B-7

Deficiencies in the AIS/MAP field

ISRAEL

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination		Description	Executing body	Date of completion	Priority for action
1	ANNEX 15: Para 6		Lack of implementation of AIRAC System	May, 1995	ICAO to follow up with State	H O	Need for implementation of AIRAC requirements	Israel	Dec, 2006	U
2	ANNEX 4: Para. 7.2		Non-production of the Enroute Chart-ICAO	May, 1995		S O	Need to produce the Enroute Chart-ICAO	Israel	Dec, 2006	A
3	ANNEX 15: Para 3.7.1		Implementation of WGS-84	Dec, 1997		H O	Need to implement WGS-84	Israel	Dec, 2006	U
4	ANNEX 15: Para. 3.2		Implementation of a Quality System	Jan, 2003		H O	Need to introduce a properly organized quality system in conformity with ISO 9000 series of quality assurance standards.	Israel	Dec, 2007	U
5	ANNEX 15: Para. 5.2.8.3		Non-production of the monthly printed plain language summary of NOTAM	Jan, 2003		H	Need to produce the monthly printed plain language summary of NOTAM	Israel	Dec, 2006	A
6	ANNEX 15 Para. 8.1		Non provision of pre-flight information service at international airports	Mar, 2004		H O	Need to provide a pre-flight information service at all aerodromes used for international air operations.	Israel	Dec, 2006	A

⁽¹⁾ Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Deficiencies in the AIS/MAP field

JORDAN

Item No	Identification		Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action	
4	ANNEX 4: Para. 7.2		Non production of the En route Chart-ICAO	May, 1995		F H O	Need to produce the Enroute Chart-ICAO	Jordan	Dec, 2005	A
2	ANNEX 15: Para. 3.2		Implementation of a Quality System	Jan, 2003		F H	Need to introduce a properly organized quality system in conformity with ISO 9000 series of quality assurance standards.	Jordan	Dec, 2006	U
3	ANNEX 15: Para. 6		Lack of implementation of AIRAC System	Mar, 2004	ICAO to follow up with State	H O	Need to fully comply with the AIRAC procedure	Jordan	Dec, 2006	U
4	Doc 8126: Para. 3.2.2 & 3.3		Lack of adequate resources and efficient working arrangements	Jul, 2005		F H	Need to provide AIS (including AIS Briefing Offices) with adequate resources and efficient working arrangements	Jordan	Jun, 2007	A

(1) Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Deficiencies in the AIS/MAP field

KUWAIT

Item No	Identification		Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action	
4	ANNEX 15: Para 6.		Lack of implementation of AIRAC System	May, 1995	ICAO to follow up with State	H O	Need for implementation of AIRAC requirements	Kuwait	Sep, 2005	U
2	ANNEX 4 Para. 16.2		Non-production of World Aeronautical Chart – ICAO 1:1 000 000	May, 1995		F H S	Need to produce the assigned sheets of the World Aeronautical Chart – ICAO 1:1 000 000	Kuwait	Dec, 2007	B
3	ANNEX 15: Para. 3.2		Implementation of a Quality System	Jan, 2003		H O	Need to introduce a properly organized quality system in conformity with ISO 9000 series of quality assurance standards.	Kuwait	Dec, 2007	U
4	ANNEX 15: Para. 3.7.2.4		Implementation of geoid undulation referenced to the WGS-84 ellipsoid.	Jan, 2003	ICAO to follow up with States to determine what action is needed to achieve implementation.	H O	Need to implement geoid undulation referenced to the WGS-84 ellipsoid.	Kuwait	Dec, 2005	A

(1) Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Deficiencies in the AIS/MAP field

LEBANON

Item No	Identification		Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action	
1	ANNEX 4 Para. 16.2		Non-production of World Aeronautical Chart – ICAO 1:1 000 000	May, 1995		F H S	Need to produce the assigned sheets of the World Aeronautical Chart – ICAO 1:1 000 000	Lebanon	Dec, 2007	B
2	ANNEX 15:Para. 3.2		Implementation of a Quality System	Jan, 2003		F H	Need to introduce a properly organized quality system in conformity with ISO 9000 series of quality assurance standards.	Lebanon	Dec, 2007	U
3	ANNEX 15:Para. 3.7.2.4		Implementation of geoid undulation referenced to the WGS-84 ellipsoid.	Jan, 2003	ICAO to follow up with State to determine what action is needed to achieve implementation.	F H	Need to implement geoid undulation referenced to the WGS-84 ellipsoid.	Lebanon	Dec, 2006	A

⁽¹⁾ Rationale for non-elimination: “F”= Financial

“H”= Human Resources

“S”= State (Military/political)

“O”= Other unknown causes

11B-11

Deficiencies in the AIS/MAP field

OMAN

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination		Description	Executing body	Date of completion	Priority for action
1	ANNEX 15:Para. 3.2		Implementation of a Quality System	Jan, 2003		H O	Need to introduce a properly organized quality system in conformity with ISO 9000 series of quality assurance standards.	Oman	Dec, 2007	U
2	ANNEX 15:Para 6.		Lack of implementation of AIRAC System	Mar, 2004	ICAO to follow up with State	H O	Need to fully comply with the AIRAC procedure	Oman	Dec, 2006	U
3	Doc 8126: Para. 3.2.2 & 3.3		Lack of adequate resources and efficient working arrangements	Jul, 2005		F H	Need to provide AIS (including AIS Briefing Offices) with adequate resources and efficient working arrangements	Oman	Jun, 2007	A
4	ANNEX 15: Para. 8.1		Non provision of pre-flight information service at international airports	Jul, 2005		F H	Need to provide a pre-flight information service at all aerodromes used for international air operations.	Oman	Jun, 2007	A
5	ANNEX 15: Para. 3.6.5		Lack of AIS automation	Jul, 2005		F H	AIS automation should be introduced with the objective of improving the speed, accuracy, efficiency and cost-effectiveness of aeronautical information services	Oman	Jun, 2007	A

(1) Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Deficiencies in the AIS/MAP field

QATAR

Item No	Identification		Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action	
1	ANNEX 4: Para. 13.2		Non-production of Aerodrome/Heliport Chart - ICAO	May, 1995		H O	Need to produce Aerodrome/Heliport Chart - ICAO for all Int'l Aerodromes	Qatar	Dec, 2006	A
2	ANNEX 15:Para. 3.2		Implementation of a Quality System	Jan, 2003		H O	Need to introduce a properly organized quality system in conformity with ISO 9000 series of quality assurance standards.	Qatar	Dec, 2007	U
3	ANNEX 15:Para. 3.7.2.4		Implementation of geoid undulation referenced to the WGS-84 ellipsoid.	Jan, 2003	ICAO to follow up with State to determine what action is needed to achieve implementation.	H	Need to implement geoid undulation referenced to the WGS-84 ellipsoid.	Qatar	Dec, 2006	A
4	ANNEX 15: Para. 8.1		Non provision of pre-flight information service at international airports	Mar, 2004		H O	Need to provide a pre-flight information service at all aerodromes used for international air operations.	Qatar	Dec, 2006	A

⁽¹⁾ Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Deficiencies in the AIS/MAP field

SAUDI ARABIA

Item No	Identification		Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action	
1	ANNEX 4: Para. 16.2		Non-production of World Aeronautical Chart – ICAO 1:1 000 000	May, 1995		F H S	Need to produce the assigned sheets of the World Aeronautical Chart – ICAO 1:1 000 000	Saudi Arabia	Dec, 2007	B
2	ANNEX 4: Para. 7.2		Non-production of the Enroute Chart-ICAO	May, 1995		F O	Need to produce the Enroute Chart-ICAO	Saudi Arabia	Jun, 2007	A
3	ANNEX 15: Para. 3.2		Implementation of a Quality System	Jan, 2003		H O	Need to introduce a properly organized quality system in conformity with ISO 9000 series of quality assurance standards.	Saudi Arabia	Feb, 2007	U
4	ANNEX 15: Para. 3.7.2.4		Implementation of geoid undulation referenced to the WGS-84 ellipsoid.	Jan, 2003	ICAO to follow up with State to determine what action is needed to achieve implementation.	H	Need to implement geoid undulation referenced to the WGS-84 ellipsoid.	Saudi Arabia	Mar, 2007	A
5	ANNEX 4: Para. 3.2		Non-production of Aerodrome Obstacle Chart-ICAO Type A	Mar, 2004	For some RWYs in Saudi Arabia, the Aerodrome Obstacle Chart-ICAO Type A has not been produced	F H O	Need to produce Aerodrome Obstacle Chart-ICAO Type A for all Int'l Airports RWYs, except if a notification to this effect is published in the AIP (if no significant obstacles exist)	Saudi Arabia	Jun, 2007	A

⁽¹⁾ Rationale for non-elimination: “F”= Financial

“H”= Human Resources

“S”= State (Military/political)

“O”= Other unknown causes

Deficiencies in the AIS/MAP field

SYRIA

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination		Description	Executing body	Date of completion	Priority for action
1	ANNEX 15: Para 6.		Lack of implementation of AIRAC System	May, 1995	ICAO to follow up with State	F H	Need to fully comply with the AIRAC procedure	Syria	Jun, 2007	U
2	ANNEX 4: Para. 16.2		Non-production of World Aeronautical Chart – ICAO 1:1 000 000	May, 1995		F H S	Need to produce the assigned sheets of the World Aeronautical Chart – ICAO 1:1 000 000	Syria	Dec, 2007	B
3	ANNEX 4 Para. 16.2		Non-production of World Aeronautical Chart – ICAO 1:1 000 000	May, 1995		F H S	Need to produce the assigned sheets of the World Aeronautical Chart – ICAO 1:1 000 000	Lebanon	Dec, 2007	B
4	ANNEX 15: Para. 3.2		Implementation of a Quality System	Jan, 2003		F H	Need to introduce a properly organized quality system in conformity with ISO 9000 series of quality assurance standards.	Syria	Jun, 2008	U
5	ANNEX 15: Para. 3.7.2.4		Implementation of geoid undulation referenced to the WGS-84 ellipsoid.	Jan, 2003	ICAO to follow up with States to determine what action is needed to achieve implementation.	F H	Need to implement geoid undulation referenced to the WGS-84 ellipsoid.	Syria	Jun, 2008	A

(1) Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Item No	Identification		Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action	
6	ANNEX 4: Para. 3.2		Non production of Aerodrome Obstacle Chart-ICAO Type A	Mar, 2004	For some RWYs in Syria, the Aerodrome Obstacle Chart-ICAO Type A has not been produced	F H	Need to produce Aerodrome Obstacle Chart-ICAO Type A for all Int'l Airports RWYs, except if a notification to this effect is published in the AIP (if no significant obstacles exist)	Syria	Sep, 2008	A
7	ANNEX 15: Para 4.2.9 & 4.3.7		Lack of regular and effective updating of the AIP	Jul, 2005	ICAO to follow up with State	F H O	Need to update the AIP on a regular basis	Syria	Dec, 2007	U
8	ANNEX 15 Para. 3.1.1.2, 3.1.5, 3.1.6 & 4.1		Lack of consistency between the different Sections of the AIP containing the same information.	Jul, 2005		H	Need to review the AIP for consistency	Syria	Dec, 2007	U
9	ANNEX 15: Para. 8.1		Non provision of pre-flight information service at international airports	Jul, 2005		F H	Need to provide a pre-flight information service at all aerodromes used for international air operations.	Syria	Dec, 2007	A
10	ANNEX 15: Para. 3.6.5		Lack of AIS automation	Jul, 2005		F H	AIS automation should be introduced with the objective of improving the speed, accuracy, efficiency and cost-effectiveness of aeronautical information services	Syria	Dec, 2007	A

⁽¹⁾ Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Deficiencies in the AIS/MAP field

UAE

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action	
4	ANNEX 4: Para. 3.2		Non-production of Aerodrome Obstacle Chart-ICAO Type A	Mar, 2004	For some RWYs in UAE, the Aerodrome Obstacle Chart-ICAO Type A has not been produced	⊖	Need to produce Aerodrome Obstacle Chart-ICAO Type A for all Int'l Airports RWYs, except if a notification to this effect is published in the AIP (if no significant obstacles exist)	UAE	Apr, 2005	A

⁽¹⁾ Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

11B-17

Deficiencies in the AIS/MAP field

YEMEN

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination		Description	Executing body	Date of completion	Priority for action
1	ANNEX 15: Para 6.		Lack of implementation of AIRAC System	May, 1995	ICAO to follow up with State	H O	Need to fully comply with the AIRAC procedure	Yemen	Dec, 2006	U
2	ANNEX 4: Para. 16.2		Non-production of World Aeronautical Chart – ICAO 1:1 000 000	May, 1995		F H S	Need to produce the assigned sheets of the World Aeronautical Chart – ICAO 1:1 000 000	Yemen	Dec, 2007	B
3	ANNEX 4: Para. 7.2		Non-production of the Enroute Chart-ICAO	May, 1995		F H	Need to produce the Enroute Chart-ICAO	Yemen	Dec, 2006	A
4	ANNEX 15: Para. 3.2		Implementation of a Quality System	Jan, 2003		F H	Need to introduce a properly organized quality system in conformity with ISO 9000 series of quality assurance standards.	Yemen	Dec, 2007	U
5	ANNEX 4: Para. 11.2		Non-production of Instrument Approach Chart-ICAO	Jan, 2003	Yemen has produced the Instrument Approach Chart-ICAO except for TAIZ Intl Airport	O	Need to produce Instrument Approach Chart-ICAO for all Int'l Aerodromes	Yemen	Dec, 2006	A
6	ANNEX 15: Para. 8.1		Non provision of pre-flight information service at international airports	Mar, 2004		F H	Need to provide a pre-flight information service at all aerodromes used for international air operations.	Yemen	Jun, 2007	A

⁽¹⁾ Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action
7	ANNEX 15: Para. 3.6.5		Lack of AIS automation	Jul, 2005	F H	AIS automation should be introduced with the objective of improving the speed, accuracy, efficiency and cost-effectiveness of aeronautical information services	Yemen	Jun, 2007	A

Note:

* Priority for action to remedy a deficiency is based on the following safety assessments:

“U” priority = Urgent requirements having a direct impact on safety and requiring immediate corrective actions.

Urgent requirement consisting of any physical, configuration, material, performance, personnel or procedures specification, the application of which is urgently required for air navigation safety.

“A” priority = Top priority requirements necessary for air navigation safety.

Top priority requirement consisting of any physical, configuration, material, performance, personnel or procedures specification, the application of which is considered necessary for air navigation safety.

“B” priority = Intermediate requirements necessary for air navigation regularity and efficiency.

Intermediate priority requirement consisting of any physical, configuration, material, performance, personnel or procedures specification, the application of which is considered necessary for air navigation regularity and efficiency.

Definition:

A *deficiency* is a situation where a facility, service or procedure does not comply with a regional air navigation plan approved by the Council, or with related ICAO Standards and Recommended Practices, and which situation has a negative impact on the safety, regularity and/or efficiency of international civil aviation.

⁽¹⁾ Rationale for non-elimination: “F”= Financial

“H”= Human Resources

“S”= State (Military/political)

“O”= Other unknown causes

ATM/SAR/AIS SG/8
Report on Agenda Item 12

REPORT ON AGENDA ITEM 12: FUTURE WORK PROGRAMME

12.1 Under this agenda item, the meeting recalled that the MMS/3 meeting was informed about the developments and actions undertaken to increase the efficiency and effectiveness of ICAO including the Regional Air Navigation Planning and Implementation Groups (PIRGs). These actions are based on the ICAO Strategic Objectives as approved by the Council for the period 2005-2010. The meeting noted in this regard that ICAO initiated the development of a Business Plan along with performance measures for the Organization. The Business Plan is designed to translate six Strategic Objectives of the Organization into action plans and ensure a link between planned activities, organizational cost and performance assessment.

12.2 The meeting noted that the TOR of PIRGs became outdated as a result of the changing aviation environment. Accordingly, it has become necessary to revise them to include the proposals made by ALLPIRG/5 under the guidelines identified by the Assembly. To achieve the above mentioned goals, the meeting recognized that it is also necessary for PIRGs to review the TOR of all subsidiary bodies within the scope of the Strategic Objectives, as established by the Council. Accordingly, the meeting reviewed and updated the TOR of the ATM/SAR/AIS Sub-Group as at **Appendix 12A** to the report on Agenda Item 12 and agreed to the following Draft Decision:

DRAFT DECISION 8/30: REVISED TOR OF THE ATM/SAR/AIS SUB-GROUP

*That, the Terms of Reference and Work Programme of the ATM/SAR/AIS Sub-Group be updated as at **Appendix 12A** to the report on Agenda Item 12.*

12.3 With a view to increase the efficiency of MIDANPIRG and its subsidiary bodies, the meeting agreed with the recommendation of the MMS/3 meeting to merge the RVSM and RNP/RNAV Task Forces into a new single Task Force, considering that the work programme of the RVSM Task Force has been almost completed after the successful and safe implementation of RVSM in the MID Region. Accordingly, the meeting developed the Terms of Reference of the new established RVSM/PBN Task Force as at **Appendix 12B** to the report on Agenda Item 12 and agreed to the following Draft Decision:

DRAFT DECISION 8/31: ESTABLISHMENT OF THE RVSM/PBN TASK FORCE

That,

- a) the RVSM and RNP/RNAV Task Forces are merged; and*
- b) the TOR of the new established RVSM/PBN Task Force are at **Appendix 12B** to the report on Agenda Item 12.*

12.4 The meeting noted that the goal of implementing the Business Plan is to attain a result-oriented, performance-based organization and to introduce new working methods by ensuring the efficient and prudent use of limited resources. Furthermore, on advice from the Council, all Bureau and Regional Offices have initiated the development of their own Operational Plans in which critical tasks are broken down into smaller, contributing tasks. Accordingly, there would have to be a transition process and ultimately MIDANPIRG subsidiary bodies would need to develop project proposals for submission to MIDANPIRG for endorsement.

ATM/SAR/AIS SG/8
Report on Agenda Item 12

12.5 Based on the above and in support of the evolution from a system-based to a performance-based approach to planning and implementation of air navigation, the meeting agreed to the following Draft Decision:

DRAFT DECISION 8/32: IMPLEMENTATION OF WORK PROGRAMME IN SUPPORT OF STRATEGIC PERFORMANCE OBJECTIVES

That, in support of the evolution from a system-based to a performance-based approach to planning and implementation of air navigation, the following projects in the ATM/SAR and AIS/MAP fields be proposed for review by the CNS/ATM/IC Sub-Group before submission to MIDANPIRG:

- a) *Improvement of the MID ATS route structure (FUA, dynamic and flexible ATS route management, improved Civil/Military coordination, etc);*
- b) *Enhancement of MID States' TMA management;*
- c) *MID RMA operations continuity;*
- d) *Support of the introduction and implementation of SMS in the MID States;*
- e) *Development of MID States' contingency plans;*
- f) *Improvement of the quality and efficiency of aeronautical information services provided by MID States; and*
- g) *Provision of eTOD by MID States.*

12.6 In accordance with the ICAO Business plan and the requirements for performance monitoring, the meeting developed a draft follow-up action plan as at **Appendix 12C** to the report on Agenda Item 12.

12.7 In accordance with the MIDANPIRG Procedural Handbook and based on its Terms of Reference and Action Plan/Work Programme, the meeting agreed that the date of its next meeting be determined by the ICAO MID Regional Office in coordination with the Chairman of the Sub-Group and Oman, which is willing to host the ATM/SAR/AIS SG/9 meeting. The meeting expressed its appreciation and gratitude to Oman for their support to the MIDANPIRG activities and invited other MID States to follow Oman's initiative.

12.8 The meeting then agreed on the provisional agenda for the ATM/SAR/AIS SG/9 meeting as at **Appendix 12D** to the report on Agenda Item 12.

ATM/SAR/AIS SG/8
Appendix 12A to the Report on Agenda Item 12

**AIR TRAFFIC MANAGEMENT / SEARCH AND RESCUE /
AERONAUTICAL INFORMATION SERVICES SUB-GROUP (ATM/SAR/AIS SG)**

Terms of Reference:

- a) To ensure that the planning and implementation of ATM systems in the region, is coherent and compatible with systems in adjacent regions, and that it is carried out within the framework of the ATM Operational Concept, the Global Air Navigation Plan and the associated Global Plan Initiatives (GPIs);
- b) To keep under review the adequacy of requirements in the Air Traffic Management, Aeronautical Information Services and Search and Rescue fields, taking into account, *inter alia*, changes to aircraft operations and new operational requirements or technological developments.
- c) To identify, State by State, those specific deficiencies and problems that constitute major obstacles to the provision of efficient air traffic management, aeronautical information services and search and rescue services and recommend specific measures to eliminate them.

Work Programme:

- 1- Analyse the operational implications of the introduction of ICAO CNS/ATM systems in the fields of ATM, SAR and AIS/MAP and propose any required actions with a view to ensuring their smooth integration in the operational environment.
- 2- Consider problems and make specific recommendations relating to ATM interface issues with other regions.
- 3- Review the existing ATS route network (~~including RNAV routes~~) on a systematic basis with a view to achieving an optimum flow of air traffic while keeping flight distances of individual flights to the minimum.
- 4- Monitor achievements and progress in the implementation of RVSM in the region in light of acquired experience.
- 5- Ensure that the RVSM monitoring function as a Multinational ICAO Air Navigation Facility/Service is defined in accordance with the existing guidelines on the establishment and provision of multinational ICAO air navigation facilities/services.
- 6- Support the implementation of area navigation (RNAV) and required navigation performance (RNP), where required, according to the performance-based navigation concept.
- 7- Taking into account human factors, study problems and make specific recommendations related to ATS and AIS personnel in the new man-machine environment, with a view to ensuring the best services to users.

- 8- Study the requirements for civil/military coordination procedures, including the promotion of the implementation of the concepts of joint use of airspace, free flight, flexible tracks, etc. and consider reducing and/or eliminating prohibited, restricted and danger areas.
- 9- Monitor developments in the SSR planning criteria and review the allocation of SSR codes in the region.
- 10- Review the ATM requirements for navigation.
- 11- Identify the ATM requirements for surveillance (RADAR, ADS, voice etc.).
- 12- Carry out studies and develop recommendations aimed at facilitating in an effective manner for:
 - i) the development of contingency plans;
 - ii) the reduction of air traffic incidents;
 - iii) the implementation of ACAS, ATIS, pressure-altitude reporting transponders, digital flight information service (D-FIS), MSAW/CFIT, and other emerging systems;
 - iv) the establishment of a safety oversight programme in the MID Region.
- 13- Carry out an analysis of the ATS reported incidents and propose remedial actions as necessary.
- 14- Keep MIDANPIRG appraised of recurring incidents which may have a serious impact on the safety of air navigation in the region.
- 15- Assist States in the establishment and follow-up of safety management programmes.
- 16- Review the requirements and monitor the status of implementation of Search and Rescue (SAR) services.
- 17- Promote the development of SAR agreements.
- 18- Review the requirements and monitor the status of implementation of AIS/MAP services, including AIS automation.
- 19- Analyse, review and monitor deficiencies in the ATM/SAR and AIS/MAP fields.

Priority:

- ~~A — High priority tasks, on which work should be speeded up.~~
- ~~B — Medium priority tasks, on which work should be undertaken as soon as possible, but without detriment to priority A tasks.~~
- ~~C — Lesser priority tasks, on which work should be undertaken as time and resources permit, but without detriment to priority A and B tasks.~~
- ~~(*) — This task will be a subject of coordination with the Traffic Forecasting Task Force.~~

Composition

The Sub-Group will be composed of the 15 MID Region Provider States , IATA, IFALPA and IFATCA.

MIDDLE EAST RVSM/PBN TASK FORCE

TERMS OF REFERENCE

(November 2006)

1. Follow-up on the MID RMA operation.
2. Consider interface issues related to RVSM implementation and operations within the Region as well as with adjacent Regions.
3. To carry out studies in support of the implementation of Performance Based Navigation (PBN) in the MID Region on an evolutionary basis, taking into account the introduction of new technologies, anticipated requirements for reductions in separation standards and the work being carried out by the ICAO Review of the Separation and Air Safety Panel (SASP).
4. Determine and recommend, on the basis of these studies, the PBN strategy for the MID Region as well as areas and/or routes where RNP/RNAV should be applied.
5. Study the requirements for RNP 1/RNAV 1 in the MID Region.
6. Develop an amendment proposal to the MID Regional Supplementary Procedures concerning the implementation of PBN in the region.
7. Extract from published guidance material information as may be applicable to the Region to facilitate the implementation of PBN.
8. Assist States within the Region that require support in the implementation of RVSM and/or RNAV/RNP.

ATM/SAR/AIS SG/8
 Appendix 12C to the Report on Agenda Item 12

**ATM/SAR/AIS SUB GROUP
 DRAFT FOLLOW-UP ACTION PLAN**

CONC/DEC No. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
8/1 -- D	MID ATS Route Network	That, pending MIDANPIRG/10 approval: a) the MID Basic ANP Table ATS 1 be amended in accordance with approved procedures to reflect the changes agreed by the ATM/SAR/AIS Sub Group as at Appendix 3A to the report on Agenda Item 3; and b) the list of Future ATS Route requirements at Appendix 3B to the report on Agenda Item 3, be used within the framework of the ATM/SAR/AIS Sub Group for future improvements of the MID ATS route network.	Update the MID basic ANP	ICAO MID Office	MID Basic ANP Amendment Proposal	April 2007
8/2 -- A and D	Civil Military Coordination	That, with a view to ensure effective/optimum civil/military co-ordination and joint use of airspace with a maximum degree of safety, regularity and efficiency of international civil air traffic, States which have not yet done so, are urged to: a) implement Assembly Resolution A35-14 Appendix P and the provision of Annexes 2, 11 and 15 as well as LIM MID (COM/MET/RAC) RAN Meeting 1996, Recommendations 2/9, 2/10 and 2/13; b) give due consideration to the urgent establishment of civil/military coordination bodies for airspace management and air traffic control;	Implement the Conclusion Conduct Seminar	States ICAO	State Letter Civil/Military Coordination Seminar Input from States	TBD

CONC/DEC No. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
		<p>c) arrange for letters of agreement (LOAs) to be signed between ATS authorities and Military authorities in order to establish coordination procedures for the exchange of information; and</p> <p>d) ensure that the Military authorities are:</p> <ul style="list-style-type: none"> i) fully involved in the airspace planning and management process; ii) aware of the new developments in civil aviation; and iii) involved in national, regional and international aviation meetings, workshops, seminars and training sessions, as appropriate. 				
<p>8/3 -- A and D</p>	<p>Coordination of flights operating over High Seas</p>	<p>That, taking into consideration that the Convention on International Civil Aviation shall be applicable only to civil aircraft:</p> <ul style="list-style-type: none"> a) all parties involved are urged to ensure that proper coordination between the ATS authorities and foreign military units operating over the high seas be carried out to the extent practicable; b) State aircraft operating in airspace over high seas, should: <ul style="list-style-type: none"> i) adhere, to the extent practicable, to ICAO provisions; or 	<p>Implement the Conclusion</p> <p>Conduct Seminar</p>	<p>States ICAO IATA</p>	<p>State Letter Civil/Military Coordination Seminar Input from States</p>	<p>TBD</p>

CONC/DEC No. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
		<p>ii) operate with “Due Regard” for the safety of navigation of civil aircraft where there are operational situations that do not lend themselves to ICAO flight procedures.</p> <p>c) States report any incident relating to uncoordinated flights operating over high seas, in a timely manner (within 15 days) and in accordance with the suggested mechanism illustrated in the flow chart at Appendix 3C to the report on Agenda Item 3.</p>				
<p>8/4 -- A and D</p>	<p>Uncoordinated flights over the Red Sea Area</p>	<p>That,</p> <p>a) the procedures at Appendix 3D to the report on Agenda Item 3, be followed by all civil uncoordinated flights and, to the extent practicable, to military aircraft operating over the Red Sea area;</p> <p>b) States, which have not yet done so, publish an AIP Supplement, as soon as possible, for the promulgation of these procedures;</p> <p>c) IATA continue its effort in ensuring that concerned operators are fully conversant with these procedures;</p> <p>d) all parties involved, through their proper channels, take appropriate action to ensure that the airspace users be informed of and comply with the agreed procedures; and</p>	<p>Implement the Conclusion</p> <p>Conduct Seminar</p>	<p>States ICAO IATA</p>	<p>State Letter Civil/Military Coordination Seminar Input from States</p>	<p>TBD</p>

CONC/DEC No. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
		<p>e) States:</p> <ul style="list-style-type: none"> i) report without delay all incidents relating to civil uncoordinated flights over the Red Sea Area; and ii) report any incident relating to State aircraft operating over the Red Sea Area, in a timely manner (within 15 days) and in accordance with the suggested mechanism illustrated in the flow chart at Appendix 3C to the report on Agenda Item 3. 				
<p>8/5 -- A</p>	<p>Provision of data for the development of the RVSM Post-Implementation Safety Analysis</p>	<p>That, in accordance with MIDANPIRG/9 Conclusion 9/23 and with a view to have the RVSM post-implementation safety analysis ready before MIDANPIRG/10 meeting:</p> <ul style="list-style-type: none"> a) States, who have not yet done so, provide the required data to the MID RMA as soon as possible; b) States not providing the required data to the MID RMA, in accordance with the requirements of safety monitoring agencies, be included in the MIDANPIRG List of air navigation deficiencies; c) the MID RMA ensure that the requests for provision of data are extended to MID States' RVSM Programme Managers and their Alternates in order to carry out the necessary internal coordination and speed up the process of collection of data; and 	<p>Urge States concerned</p> <p>Update list of deficiencies</p>	<p>ICAO MID RMA States</p>	<p>- State Letter -Correspon- dences - Provision of required data in a timely manner</p>	<p>March 2007</p>

CONC/DEC No. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
		d) States ensure that good communication and cooperation between the RVSM Programme Managers and the MID RMA Board Members is established and observed.				
8/6 -- A, D, E	Special Baghdad FIR Coordination meeting	That, with a view to address coordination issues between Iraq and its adjacent States, a Special Baghdad FIR Coordination Meeting be organized under the aegis of ICAO with the attendance of Iraq, Iran, Jordan, Kuwait, Saudi Arabia, Syria, Turkey, IATA, IFALPA, FAA, the Combined Forces Air Component Commander (CFACC) and the MID RMA.	Conduct the meeting	ICAO Iraq and adjacent States	Report of the meeting	TBD
8/7 -- A and D	Survey relative to the improper handling of FPLs and associated ATS messages	That, a) the methodology for the identification of causes of improper handling of FPLs and associated ATS messages at Appendix 4A to the report on Agenda Item 5 is endorsed; and b) States carry out a survey relative to the improper handling of FPLs and associated ATS messages based on this methodology for a period of at least one month.	Carry out the survey and analyze the results	ICAO States CNS SG, CNS/ATM/IC SG and ATM/SAR/AIS SG	- State Letter - Survey replies - Analysis of results	Dec.2007
8/8 -- A and D	Flexible handling of traffic intending to use the RVSM airspace	That, in accordance with the provisions of the ATC MANUAL FOR A REDUCED VERTICAL SEPARATION MINIMUM (RVSM) IN THE MID REGION, and with a view to enhance the safety and efficiency of air navigation in the MID Region:	Follow-up with concerned States	States IATA	- State Letter - Reports from IATA - Input from States	Dec.2007

CONC/DEC No. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
		<p>a) States are urged to refrain from taking actions unilaterally to systematically penalize the flights intending to use the RVSM airspace when:</p> <ul style="list-style-type: none"> i) there's a doubt about the aircraft's RVSM approval status (missing of letter "W" from the FPL); or ii) the FPL was not received; and <p>b) States are invited to show more flexibility in dealing with this issue.</p>				
8/9 -- A and D	Establishment of a MID Region SSR Code Study Group	That, the MID Region SSR Code Study Group be established with the terms of reference as at Appendix 5A to the report on Agenda Item 5.	Conduct the meeting	ICAO	<ul style="list-style-type: none"> - State Letter - Report of the meeting - Guidance material 	Dec.2007

CONC/DEC No. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
8/10 -- A	Reporting Mechanism and sharing of safety-related information	<p>That, States:</p> <ul style="list-style-type: none"> a) update their legislation to support a “just culture” reporting environment as part of their safety programme; b) develop and implement non-punitive reporting mechanisms as part of their safety programme for the identification of hazards and assessment of risks in order to implement appropriate mitigating measures; c) designate focal points to whom operators can send incident reports for investigation and resolution and from whom they could request information for clarification purpose; and d) share information on ATS incidents and accidents. 	Urge States to comply with the Conclusion	ICAO States	State Letter Reports from States	TBD

CONC/DEC No. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
<p>8/11 -- A</p>	<p>Survey on ATS Safety Management</p>	<p>That,</p> <p>a) States, that have not yet done so, are urged to establish a safety programme in order to achieve an acceptable level of safety in the provision of ATS;</p> <p>b) with a view to obtain information from MID States regarding the status of implementation of SMS within their Air Traffic Services and/or the difficulties they face to implement the required system, ICAO MID Regional Office carry out a survey on the implementation of SMS; and</p> <p>c) States take advantage of the SMS guidance material available and training courses offered by ICAO.</p>	<p>- Carry out the survey and analyze the results - Conduct SMS Training Course</p>	<p>ICAO States</p>	<p>- Training Course - State Letter - Survey replies - Analysis of results</p>	<p>May.2007 Jan.2008</p>

CONC/DEC No. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
<p>8/12 -- A</p>	<p>Development and Promulgation of Contingency Plans</p>	<p>That,</p> <ul style="list-style-type: none"> a) States are urged to develop and promulgate contingency plans in accordance with Annex 11 and Annex 15 provisions; b) ICAO MID Office carry out a survey on the status of development and promulgation of contingency plans in the Region; c) States use the template at Appendix 7A to the report on Agenda Item 7 for the development and promulgation of contingency plans; and d) the relevant subsidiary bodies of MIDANPIRG revise their Terms of Reference (TOR) to include the development of regional guidance material leading to a MID Regional Contingency Plan for ATM including supporting CNS elements. 	<ul style="list-style-type: none"> - Carry out the survey and analyze the results 	<p>ICAO States</p>	<ul style="list-style-type: none"> - State Letter - Survey replies - Analysis of results 	<p>May.2007 Aug.2007 Dec.2007</p>
<p>8/13 -- A and E</p>	<p>SAR Agreements</p>	<p>That, with a view to strengthen search and rescue cooperation and coordination:</p> <ul style="list-style-type: none"> a) States are urged to sign SAR agreements with their neighboring States; and b) The model of SAR agreement available in the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR Manual) attached as Appendix 8A to the report on agenda item 8, be used to guide States in the development of their own SAR agreements. 	<ul style="list-style-type: none"> - Urge States to sign SAR agreements - Conduct Seminar 	<p>ICAO States</p>	<ul style="list-style-type: none"> - State Letter - Seminar - SAR agreements signed 	<p>May 2007 3Q 2008 Dec.2008</p>

CONC/DEC No. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
<p>8/14 -- A and E</p>	<p>406 MHz Beacon Registration Database (IBRD)</p>	<p>Taking into consideration that:</p> <ul style="list-style-type: none"> i) the International 406 MHz Beacon Registration Database (IBRD) became operational on 16 January 2006; ii) the service that Cospas-Sarsat System can provide to users of 406 MHz ELTs is much enhanced over that available to 121.5 ELT users; and iii) Cospas-Sarsat will cease processing of 121.5/243 MHz ELTs from 1 February 2009. <p>That, accordingly:</p> <ul style="list-style-type: none"> a) all ELT owners and users of 121.5/243 MHz ELTs are invited to upgrade to 406 MHz ELT as soon as possible and in any case before 1 February 2009; b) all ELT owners register their 406 MHz ELTs in the IBRD database; and c) States are invited to designate an IBRD focal point and request that Cospas-Sarsat allocate for him a user identification and password with a view to access the IBRD database and take full advantage of the service available. 	<p>Follow up with ELT owners</p>	<p>ICAO States</p>	<p>- State Letter - Input from States on registration of in the IBRD database</p>	<p>3Q 2007 Dec.2008</p>

CONC/DEC No. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
8/15 -- A and D	MID Region PBN Strategy	<p>That, the RVSM /PBN Task Force:</p> <p>a) follow up the developments related to Performance Based Navigation (PBN); and</p> <p>b) develop a MID Region strategy to implement the PBN concept.</p>	Conduct a PBN Seminar and the RVSM/PBN TF/1 meeting	ICAO RVSM/PBN TF	<ul style="list-style-type: none"> - Seminar - Report of the meeting - MID Region PBN Strategy 	Dec.2007
8/16 -- A	ICAO Language Proficiency	<p>That, with a view to expedite the process of implementation of the ICAO Language proficiency requirements, States are urged to:</p> <p>a) ensure that all stakeholders (pilots, controllers, language teachers, regulators etc.) are familiar with the ICAO language proficiency requirements;</p> <p>b) adopt/incorporate the ICAO language proficiency requirements (Amendment 164 to Annex 1) into national legislation;</p> <p>c) establish a plan to coordinate administrative and training matters (testing, number of personnel to be trained, training centres, duration of training, etc.);-</p> <p>d) develop/select test(s) to meet ICAO language proficiency requirements;</p> <p>e) assess current language proficiency level of controllers and pilots, according to the ICAO rating scale;</p> <p>f) develop language training packages designed to reduce the gap between current language proficiency level and ICAO Level 4;</p>	Follow-up with States Conduct a Seminar	ICAO States	<ul style="list-style-type: none"> - State Letter - Seminar - Input from States 	<p>May 2007</p> <p>3Q 2007</p> <p>Mar. 2008</p>

CONC/DEC No. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
		<p>g) develop language training package to maintain language proficiency and a schedule of language refresher training;</p> <p>h) review recruitment and selection procedures and consider a minimum of at least ICAO level 3 in language proficiency before entry to professional training programmes; and</p> <p>i) present reports to ICAO on progress achieved in preparing for implementation of ICAO language proficiency requirements, on regular basis.</p>				
8/17 -- A	Use of the English Language and Standard ICAO Phraseology	<p>That,</p> <p>a) States are urged to ensure that their air traffic controllers and pilots use the standard ICAO phraseology in aeronautical communication; and</p> <p>b) with a view to improve situational awareness and prevent the occurrence of ATS incidents and accidents, States are invited to implement measures that require or encourage air traffic controllers and pilots to:</p> <p style="padding-left: 40px;">i. use as much as possible the English language in aeronautical communication; and</p>		States		

CONC/DEC No. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
		<p>ii. use only the English language in aeronautical communication, in all situations where at least one of the pilots in the environment (sector) does not speak the national language.</p>				
<p>8/18 -- A and D</p>	<p>Use of email to enhance communication between the AIS Community in the MID Region</p>	<p>That, with a view to enhance the communication between the AIS Community in the MID Region:</p> <p>a) States, who have not yet done so, publish in their AIP (para. GEN 3.1.1) their AIS email address, as soon as possible; and</p> <p>b) ICAO consider the amendment of Annex 15 Appendix 1, para. GEN 3.1.1 to add such requirement.</p>	<p>Comply with the Conclusion</p>	<p>ICAO HQ States AIS/MAP TF</p>	<p>- Appropriate provisions in Annex 15 - Feed back from States and users</p>	<p>TBD</p>
<p>8/19 -- A and D</p>	<p>Advance Posting of the AIRAC information on the web</p>	<p>That, with a view to improve the timeliness of aeronautical information, MID States are invited to arrange for the advance posting of AIRAC information on the web, before dissemination of the official hardcopies of the AIP Amendment/ Supplement.</p>	<p>Comply with the Conclusion</p>	<p>States AIS/MAP TF</p>	<p>Feed back from States and users</p>	<p>TBD</p>
<p>8/20 -- A and D</p>	<p>Electronic AIP (eAIP)</p>	<p>That,</p> <p>a) pending the development of Global eAIP provisions, MID States, who have not yet done so, publish their Integrated Aeronautical Information Package in PDF/HTML format on a CD-ROM, without discontinuing the provision of the information in hardcopy; and</p>	<p>Comply with the Conclusion</p>	<p>States ICAO HQ</p>	<p>- States publish their eAIP. - ICAO issue Appropriate provisions in Annex 15 Related to eAIP</p>	<p>TBD</p>

CONC/DEC No. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
		b) in order to prevent proliferation of eAIP formats, ICAO consider developing necessary specifications and clear provisions related to the eAIP content, structure, presentation and format.				
8/21 -- A and D	Methodology for the implementation of QMS within MID States' AISs	That, States, who have not yet implemented a QMS within their AIS, are urged to apply the methodology at Appendix 10A to the report on Agenda Item 10.	Follow up with concerned States	ICAO States AIS/MAP TF	- State Letter - Feed back from States	Jun.2007 Dec.2007
8/22 -- A and D	Establishment of a QMS implementation Action Group	That, the QMS implementation Action Group is established with Terms of Reference as at Appendix 10B to the report on Agenda Item 10.	Conduct meeting of the Action Group	ICAO	- Report of the meeting - Guidance material	TBD
8/23 -- A and D	Licensing of the AIS/MAP Personnel	That, recognizing the importance of AIS and the safety implication of the non-provision of timely and high quality aeronautical information, and taking into consideration Annex 15 requirements for the evaluation and maintenance of the competence/skill of the AIS staff, ICAO consider the introduction of the licensing of the AIS/MAP personnel as a Recommended Practice in Annex 1.	Follow up with ICAO HQ	ICAO	Appropriate provisions in Annex 1	TBD
8/24 -- A	Roadmap for the implementation of eTOD requirements	That, a) States develop their plans related to the implementation of eTOD requirements; and b) communicate their implementation roadmap to the ICAO MID Regional Office, prior to 31 December 2006 , specifying clearly if they would encounter any difficulty to comply with the dates of applicability.	Follow up with States	ICAO States	- eTOD Seminar - State Letter - Action Plan/ Roadmap for the implementation of eTOD	Dec.2006 Mar.2007

CONC/DEC No. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
8/25 -- A	Collaborative approach for the implementation of eTOD Requirements	<p>That, with a view to expedite the implementation of eTOD requirements, MID States:</p> <p>a) develop a high level policy for the management of a national eTOD programme;</p> <p>b) define clearly the responsibilities and roles of the different Administrations within and outside the Civil Aviation Authority in the implementation process (AIS, Aerodromes, Military, National Geographic and Topographic Administrations/Agencies, etc); and</p> <p>a) secure the necessary resources for the eTOD programme.</p>	Comply with the conclusion	States	- National eTOD Programme defined and managed.	Jun.2007
8/26 -- A	Establishment of an eTOD Working Group	That, for harmonization and coordination of eTOD implementation activities on a regional basis, the electronic Terrain and Obstacle Data Working Group is established with Terms of Reference as at Appendix 10C to the report on Agenda Item 10.	<p>Creation of the eTOD WG</p> <p>Follow up the work programme</p>	MIDANPIRG AIS/MAP TF	<p>- TOR</p> <p>- Report of meeting</p> <p>- Guidance material</p>	<p>Apr.2007</p> <p>Jul.2007</p> <p>Dec.2007</p>
8/27 -- D	AIS/MAP Timelines for the MID Region	That, the AIS/MAP Timelines for the MID Region be updated as at Appendix 10D to the report on Agenda Item 10.	Follow up the timelines	MIDANPIRG AIS/MAP TF	<p>- Timelines</p> <p>- Feed back from States</p>	<p>Apr.2007</p> <p>1Q 2008</p>
8/28 -- D	Revised Terms of Reference and Work Programme of the AIS/MAP Task Force	That, the AIS/MAP Task Force's Terms of Reference and Work Programme be updated as at Appendix 10E to the report on Agenda Item 10.	Follow up the work programme	MIDANPIRG AIS/MAP TF	Approved TOR Report of AIS/MAP TF/4	<p>Apr.2007</p> <p>2Q 2008</p>

CONC/DEC No. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
8/29 -- A and D	Follow-up on the outcome of the Global AIS Congress	That, ICAO, with the support of States and international organizations, take necessary follow-up action, as soon as possible, to implement the Recommendations of the Global AIS Congress.	Follow up developments in ICAO HQ	ICAO	Amendment of Annex 4 and Annex 15 as appropriate	TBD
8/30 -- A, C, D, E	Revised TOR of the ATM/SAR/AIS Sub-Group	That, the Terms of Reference and Work Programme of the ATM/SAR/AIS Sub-Group be updated as at Appendix 12A to the report on Agenda Item 12.	Follow up the work programme	MIDANPIRG ATM/SAR/AIS SG	Approved TOR Report of ATM/SAR/AIS SG/9	Dec.2007
8/31 -- A, C, D	Establishment of the RVSM/PBN Task Force	That, a) the RVSM and RNP/RNAV Task Forces are merged; and b) the TOR of the new established RVSM/PBN Task Force are at Appendix 12B to the report on Agenda Item 12.	Conduct the RVSM/PBN TF/1 meeting	MIDANPIRG RVSM/PBN TF	Approved TOR Report of RVSM/PBN TF/1	Dec.2007
8/32 -- A, C, D, E	Implementation of Work Programme in support of strategic Performance Objectives	That, in support of the evolution from a system-based to a performance-based approach to planning and implementation of air navigation, the following projects in the ATM/SAR and AIS/MAP fields be proposed for review by the CNS/ATM/IC Sub-Group before submission to MIDANPIRG: a) Improvement of the MID ATS route structure (FUA, dynamic and flexible ATS route management, improved Civil/Military coordination, etc); b) Enhancement of MID States' TMA management; c) MID RMA operations continuity;	Follow up the approval of the different projects and their progress	CNS/ATM/IC MIDANPIRG ICAO States	- WPs to the CNS/ATM/IC SG/3 meeting and MIDANPIRG/10 - Feed back on each project	Mar.2007 TBD

CONC/DEC No. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
		<ul style="list-style-type: none"> d) Support of the introduction and implementation of SMS in the MID States; e) Development of MID States' contingency plans; f) Improvement of the quality and efficiency of aeronautical information services provided by MID States; and g) Provision of eTOD by MID States. 				

ATM/SAR/AIS SG/8
Appendix 12D to the Report on Agenda Item 12

**NINTH MEETING OF THE MIDANPIRG AIR TRAFFIC MANAGEMENT/SEARCH AND RESCUE/
AERONAUTICAL INFORMATION SERVICE SUB-GROUP (ATM/AIS/SAR SG/9)**

PROVISIONAL AGENDA

- Agenda Item 1: Adoption of provisional agenda
- Agenda Item 2: Follow-up on MIDANPIRG Decisions and Conclusions relevant to the ATM/SAR and AIS/MAP fields
- Agenda Item 3: Improvement of the MID ATS Route Network
- Agenda Item 4: RVSM operations and Monitoring activities in the MID Region
- Agenda Item 5: SSR Code Allocation Plan (CAP) for the MID Region
- Agenda Item 6: ATS Safety Management Systems and Incident Analysis
- Agenda Item 7: Contingency Plans
- Agenda Item 8: Status of implementation of Search and Rescue (SAR) provisions
- Agenda Item 9: Latest developments in the ATM field
- Agenda Item 10: AIS/MAP issues
- Agenda Item 11: Review of Air Navigation deficiencies in the ATM/SAR and AIS/MAP fields
- Agenda Item 12: Future Work Programme
- Agenda Item 13: Any other business

ATM/SAR/AIS SG/8
Report on Agenda Item 13

REPORT ON AGENDA ITEM 13: ANY OTHER BUSINESS

13.1 Nothing has been discussed under this Agenda Item.

ATM/SAR/AIS SG/8
Attachment A to the Report

LIST OF PARTICIPANTS

NAME	TITLE & ADDRESS
STATES BAHRAIN Mr. Fareed Abdullah Al Alawi	Head, Aeronautical Informatics & Airspace Planning Ministry of Transportation Civil Aviation Affairs P.O. Box 586 KINGDOM OF BAHRAIN Fax: (973) 17 32 1992 Tel: (973) 1732 1180 Mobile: (973) 396 51596 Email: falalawi @caa.gov.bh
Mr. Mohamed Ahmed Al Hallaq	Supervisor Aeronautical Information Ministry of Transportation Civil Aviation Affairs P.O. Box 586 KINGDOM OF BAHRAIN Fax: (973) 17323876 Tel: (973) 17321181 Mobile: (973)39684688 Email: alhallaq@caa.gov.bh
Mr. Saleem Mohamed Hassan	Chief Air Traffic Management Ministry of Transportation Civil Aviation Affairs P.O. Box 586 KINGDOM OF BAHRAIN Fax: (973) 17 321 992 Tel: (973) 17 321 117 Mobile: (973) 39 608 860 Email: saleemmh@caa.gov.bh

NAME	TITLE & ADDRESS
EGYPT Dr. Mohsen El Agaty	Director of Research and Development National Air Navigation Services Company Cairo Navigation Center Cairo International Airport Road Cairo - EGYPT Fax: (202) 267 1056 Tel: (202) 2650743 Mobile: (2010) 1623922 Email: mohsenelagaty@yahoo.com
Mr. Mohmoud Aly Mohamed Ramadan	Director of Communication & Information Computers National Air Navigation Services Company Cairo Navigation Center Cairo International Airport Road Cairo - EGYPT Fax: (202)2685293 Tel: (202)2675649 Mobile: (2010)6541506 Email: xhamdy@yahoo.com
Mr. Essam Eldin Ahmed Kilany	Director of NOTAM Office Cairo International NOTAM Office Terminal 2 Tel: (202) 2678882 Mobile: (2010) 1873931
Mr. Ragi Shafik Nashed	Inspector of A.T.C. Egyptian Civil Aviation Authority Ministry of Civil Aviation Cairo Airport Road Fax: (202) 267 1056 Tel: (202) 2650743 Mobile: (2010) 11811727

NAME	TITLE & ADDRESS
<p>ISLAMIC REPUBLIC OF IRAN Mr. Hamid Khazaeli</p>	<p>ACC Controller Civil Aviation Organization Tehran- ISLAMIC REPUBLIC OF IRAN Fax: (9821)44523003 Tel: (9821)44528019 (9821)44523003-4</p>
<p>Mr. Ramezanali Ziaeeegravi</p>	<p>ATS Expert and Chief of AIS Iranian Airports Company Tehran- ISLAMIC REPUBLIC OF IRAN Fax: (9821)44649269 Tel: (9821)66025108 Mobile: (98) 9122018767 Email: ais-iran@cao-ir</p>
<p>IRAQ Mr. Abbas-S-Ghali</p>	<p>ATC Director Air Traffic Control Department Civil Aviation Authority Baghdad International Airport Baghdad - IRAQ Tel: (964-1) 813 2163 Mobile: (964-790) 403 541 Email: abbas-s-ghali@yahoo.com</p>
<p>Mr. Majid J. Hashim</p>	<p>Air Traffic Controller Air Traffic Control Department Civil Aviation Authority Baghdad International Airport Baghdad - IRAQ Tel: (964-1) 7636893 Mobile: (964-790) 3817978 Email: majid-hashim@yahoo.com</p>

NAME	TITLE & ADDRESS
Mr. Waledl.Saaed	ATC Supervisor Air Traffic Control Department Civil Aviation Authority Baghdad International Airport Baghdad - IRAQ Tel: (964-1) 813 2338 Mobile: (964-790) 1613755 Email: waleed-atc@yahoo.com
KUWAIT Mr. Adel Boresli	Radar Controller Directorate General of Civil Aviation Kuwait International Airport P.O. Box 17 Safat 13001 State of KUWAIT Fax: (965) 4722405 Tel: (965) 4737583 - 4710268 Mobile: (965) 9036556 Email: kwtatssms@yahoo.com
Mr. Hamad Al-Naser	Junior Electrical Engineer Directorate General of Civil Aviation Kuwait International Airport P.O. Box 17 Safat 13001 State of KUWAIT Fax: (965) 4343417 Tel: (965) 4760421 Mobile: (965) 7652527 Email: hamadalnaser@hotmail.com
Eng. Salah Al-Khoder	Director Navigation Equipment Department Directorate General of Civil Aviation Kuwait International Airport P.O. Box 17 Safat 13001 State of KUWAIT Fax: (965)4343417 Tel: (965)4760421 Mobile: (965)9254363 Email: ned@kuwait-airport.com.kw

NAME	TITLE & ADDRESS
Mr. Salah H. Al Mushaiti	AIS Official Directorate General of Civil Aviation Kuwait International Airport P.O. Box 17 Safat 13001 State of KUWAIT Fax: (965) 476 5512 Tel: (965) 4737583 Mobile: (965) 668 1897 Email: smais@hotmail.com
Mr. Yousef K. Al-Jenae	Director, Air Navigation Department Directorate General of Civil Aviation Kuwait International Airport P.O. Box 17 Safat 13001 State of KUWAIT Fax: (965) 476 5796 (965) 4722402 Tel: (965) 471 0264 Mobile: (965) 974 8636 Email: nav1@kuwait.airport.com.kw
OMAN Mr. Hamad Ali Mohamed Al-Abri	Director of Air Navigation Services Directorate General of Civil Aviation & Meteorology P.O. Box 1 – Code 111 Seeb International Airport Muscat, SULTANATE OF OMAN Fax: (968) 24519523 Tel: (968) 24519519 Email: H.AL-ABRI@dgcam.gov.om
Mr. Abdullah Nasser Rashid Al-Harthy	Senior Air Traffic Controller Directorate General of Civil Aviation & Meteorology P.O. Box 1 – Code 111 Seeb International Airport Muscat, SULTANATE OF OMAN Fax: (968) 24510 122 Tel: (968) 24519 201 Mobile: (968) 9947 `6806 Email: abdullah_nasser@dgcam.gov.om

NAME	TITLE & ADDRESS
Mr. Hamad Mohammed Al-Affani	Air Traffic Supervisor Directorate General of Civil Aviation & Meteorology P.O. Box 1 – Code 111 Seeb International Airport Muscat, SULTANATE OF OMAN Fax: (968)24519939 Tel: (968)2451550 Mobile: (968)99472075
Mr. Nasser Salim Al-Mazrui	Supervisor ATC Directorate General of Civil Aviation & Meteorology P.O. Box 740, P.C. 111 Seeb Muscat, SULTANATE OF OMAN Fax: (968)24519939 Tel: (968)24519550 Mobile: (968)99340405 Email: nas77dxn@yahoo.com
Mr. Nasr Ghalib Al-Busaidy	Supervisor of Safety Management System+ ATC Watch Supervisor P.O. Box 218 PC 611 Nizwa- Oman Fax: (968)24519681 Tel: (968)24519684 Mobile: (968)99024991 Email: nasr@dgcam.gov.om
Mr. Rashard Aziz Al Abdessalam	Chief Training ATC Directorate General of Civil Aviation & Meteorology Seeb International Airport P.O. Box 1 - Code 111 Muscat, SULTANATE OF OMAN Fax: (968) 24519516 Tel: (968) 24519186 Mobile: (968) 9933 7824 Email: raziz@dgcam.gov.om

NAME	TITLE & ADDRESS
Mr. Sabri Al Busaidy	DMS Manager Directorate General of Civil Aviation & Meteorology Seeb International Airport P.O. Box 1 CPO Seeb 111 Seeb Airport Muscat - SULTANATE OF OMAN Fax: (968) 24519 523 Tel: (968) 24519 501 Mobile: (968) 99359415 Email: sabri@dgcam.gov.om
Mr. Saif Rashid Al-Rahbi	Pilot Royal Air Force of Oman (RAFO) Seeb Muscat, SULTANATE OF OMAN Fax: (968) 24320408 Tel: (968) 24320535 Mobile: (968) 99360555
Mr. Hilal Salim AL-Mandhari	Air Traffic Control Standard Officer Directorate General of Civil Aviation & Meteorology P.O. Box 209 Code 111 Muscat, SULTANATE OF OMAN Fax: (968) 24519516 Tel: (968) 24519186 Mobile: (968) 99877937 Email: hilal_al_madhari@yahoo.com
Mr. Saud Humaid Al-Adhoobi	Air Space Manager Directorate General of Civil Aviation & Meteorology P.O. Box 185, PC 111 Seeb Muscat, SULTANATE OF OMAN Fax: (968) 24519523 Tel: (968) 24519305 Mobile: (968) 99321664 Email: saud@dgcam.gov.om

NAME	TITLE & ADDRESS
Mr. Yasser Air Said Al Rahbi	Operation's/ATC HQ Royal Air Force of Oman Muscat, SULTANATE OF OMAN Tel: (968) 24325698 Mobile: (968) 99440091
Mr. Khamis Sulaiman Khamis Al Hinai	AIS Directorate General of Civil Aviation & Meteorology Muscat, SULTANATE OF OMAN Fax: (968) 24519850 Tel: (968) 24519350 Mobile: (968) 99 250521 Email: k.alhinai@dgcam.gov.om
Mr. Fawzi Ali Said Al-Hinai	Air Traffic Controller P.O. Box 258, P.C. 111 Fax: (968) 24519523 Tel: (968) 24519515 Mobile: (968) 99 322528 Email: Satco@yahoo.com
Mr. Saif Saleh Al Harthy	Chief ACC Directorate General of Civil Aviation & Meteorology P.O. Box 1588, Code 111 Muscat, SULTANATE OF OMAN Fax: (968) 24519523 Tel: (968) 24519040 Mobile: (968) 99 421218 Email: saif@dgcam.gov.om
SAUDI ARABIA Mr. Adel A. Makki	ATS Planning Specialist General Authority of Civil Aviation P.O. Box 51602 Jeddah 21553 – KINGDOM OF SAUDI ARABIA Fax: (966 2) 6401477 Tel: (966-2) 6405000 ext 5577 Mobile: 966 50459 1030 Email: adil_makki@hotmail.com

NAME	TITLE & ADDRESS
Mr. Hamad M. Al Alaufi	ATS Planning Manager General Authority of Civil Aviation P.O. Box 929 Jeddah 21421 KINGDOM OF SAUDI ARABIA Fax: (966-2) 640 1477 Tel: (966-2) 640 5000 ext. 5577 Mobile: (966) 555 611136 Email: alaufi@naseej.com alaufi@gawab.com
Mr. Hameed Hamad Al-Judani	Director of AIS ATS/AIS General Authority of Civil Aviation P.O. Box 929 Jeddah 21421 KINGDOM OF SAUDI ARABIA Fax: (966-2) 6405622 Tel: (966-2) 6405000 ext 5517 Mobile: (966)504671134 Email: hjudane@yahoo.com
Mr. Mohammad O. Bujair	Software Engineer General Authority of Civil Aviation P.O. Box 15444 Jeddah 21444 KINGDOM OF SAUDI ARABIA Fax: (966-2) 6719041 Tel: (966-2) 6717717 Ext. 118 Mobile: (966) 505313754 Email: mbojairhotmail.com
Mr. Wael Y.Sallam	Computer Engineer General Authority of Civil Aviation P.O. Box 15444 Jeddah 21444 KINGDOM OF SAUDI ARABIA Fax: (966-2) 6719041 Tel: (966-2) 6717717 Mobile: (966) 50017661 Email: wael@hotmail.com

NAME	TITLE & ADDRESS
SYRIA Mr. Haitham Al Refai	HQ AIS Syria General Organization of Civil Aviation Damascus Airport Damascus - SYRIA Fax: (963) 115 400752 Tel: (963) 115 400752 Mobile: 094201999 Email: alrefai4@hotmail.com
Mr. Monif Abdulla	Air Traffic Controller – Chief of Search & Rescue Damascus International Airport Damascus - SYRIA Fax: (09) 354 6974 - 3315547 Tel: (09) 354 6974 - 5400312 Mobile: 092710351
Mr. Ahmad Nattouf	Assistance Director of ATM Chief ATS/Air Navigation Inspection Damascus International Airport Damascus - SYRIA Fax: (963)115400312 (963)113315547 Tel: (963) 115400312 Mobile: (963)98765678
UNITED ARAB EMIRATES Mr. Hassan Karam	Deputy Director ANS Civil Aviation Authority P.O. Box 6558 Abu Dhabi - UNITED ARAB EMIRATES Fax: (971-2) 405 4316 Tel: (971-2) 4054501 Mobile: (971-5)08187492 Email: hkaram@gcaa.ae

NAME	TITLE & ADDRESS
Mr. Lachlan Thurston	Chief ANS Regulations Civil Aviation Authority P.O. Box 6558 Abu Dhabi - UNITED ARAB EMIRATES Fax: (971-2) 4054406 Tel: (971-2) 4054507 Mobile: (971-5)08180449 Email: lthurston@gcaa.ae
Mr. Riis Johansen	Director General, Air Navigation Services Civil Aviation Authority P.O. Box 6558 Abu Dhabi - UNITED ARAB EMIRATES Fax: (971-2) 405 4316 Tel: (971-2) 405 4216 Mobile: (971-50) 617 5319 Email: atmuae@emirates.net.ae dans@gcaa.ae
ORGANIZATIONS EUROCONTROL Mrs. Ana Paula Frangolho	Project Manager Aeronautical Manager Rue de la Fusée, 96 B-1130 Brussels Fax: (32-2) 729 90 08 Tel: (32-2) 729 47 02 Mobile: (32-4) 77668297 Email: ana-paula.frangolho@eurocontrol.int
IATA Mr. Jehad Faqir	Director, Safety Operations and Infrastructure Middle East & North Africa International Air Transport Association (IATA) P.O. BOX 940587 Amman 11194 - JORDAN Fax: (962-6) 593 9912 Tel: (962-6) 563 9919 Mobile: (962-79) 596 6559 Email: faqirj@iata.org

NAME	TITLE & ADDRESS
Capt. Faysal M. Shaaban	IATA and Technical Affairs Beirut International Airport P.O. Box 206/62 Beirut - LEBANON Fax: (961-1) 623 045 Tel: (961-1) 622 132 Mobile: (961-3) 762 631 Email: shaabanf@mea.com.lb
Mr. Mohamed Howsawi	Saudi Airlines Manager Navigation Services P.O. Box 620 CC 929 Jeddah 2123` KINGDOM OF SAUDI ARABIA Fax: (966-2) 6842260 Tel: (966-2)6842603 Mobile: (966-5)04630884 Email: mhowsawi@saudiairlines.com.sa
Mr. Farooq Al-Balushi	Manager Operation Conrol Oman Air P.O. Box. 34 Code 111 Seeb International Airpor Muscat, SULTANATE OF OMAN Fax: (968) 24510168 Tel: (968) 24519838 Mobile: (968) 99312055 Email: farooq@pas.com.om
Capt. Alexander Mukuka	A/Senior Manager Training & Standards Oman Air P.O. Box 58, Post Code 111 Muscat, SULTANATE OF OMAN Fax: (968) 24510230 Tel: (968) 2519828 Mobile: (968) 99465631 Email: alexamderm@oas.com.om

NAME	TITLE & ADDRESS
Mr. Sayed Rizwan Tirmizi	Officer Route Planning & Performance Oman Air, Flight Ops. Dept. Navigation & Performance Section P.O. Box 34, Code 111 Sultanate of Oman Fax: (968-2) 4510230 Tel: (968-2) 4519833 Mobile: (968) 99509661 Email: rizwant@oas.com.om
NATO Mr. Nigel Williams	Consultant Air Defence and Airspace Management Directorate Defence Investment Division NATO HQ Boulevard Léopold III B-1110 Brussels, Belgium Tel.: (32) 2 707 36 58 Fax: (32) 2 707 41 03 Email: Williams.nigel@hq.nato.int

- END -